

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







Entered at the Post Office at Chicago, Ill., for transmission through the mails at second-class rates.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY,  
(INCORPORATED.)

VOL. XIV.

CHICAGO, ILLINOIS, NOVEMBER 15, 1895.

No. 5.

ONE DOLLAR PER ANNUM.  
SINGLE COPY, TEN CENTS.

# Excelsior Grain-Cleaning Machinery

CONSISTING OF THE

EXCELSIOR Dustless Warehouse and Elevator Separator,  
EXCELSIOR Oat Clipper, EXCELSIOR Separator and Grader,  
EXCELSIOR "Combined Grain Machine."

ALSO

PEASE DUSTLESS SEPARATORS and WAREHOUSE FANNING MILLS,  
POWER CAR PULLERS, GASOLINE ENGINES, STEAM ENGINES, HORSE POWERS,  
POWER TRANSMISSION MACHINERY,  
GENERAL MILL AND ELEVATOR SUPPLIES.

**E. H. PEASE MFG. CO., RACINE, WISCONSIN.**

ADDRESS

Headquarters for  
SHAFTING, HANGERS, PULLEYS,  
GEARS, SPROCKET WHEELS,  
"Sweep" and "Tread" Horse Powers,  
Elevator "Boots," "Heads," "Buckets,"  
FEED GRINDERS,  
Special Flax Mills; Single, Double and  
Quadruple Flax Reels.  
..... BELTING .....  
"Platform," "Hopper" and "Dump"  
Scales, Flexible Loading Spouts.  
Corn Shellers, all kinds of FITTINGS,  
SUPPLIES and MACHINERY for  
Elevators and Mills.  
Elevator Equipments a Specialty.

GALDWELL  
CONVEYOR  
HORSE POWERS  
WIRE ROPE  
BELT TIGHTENERS

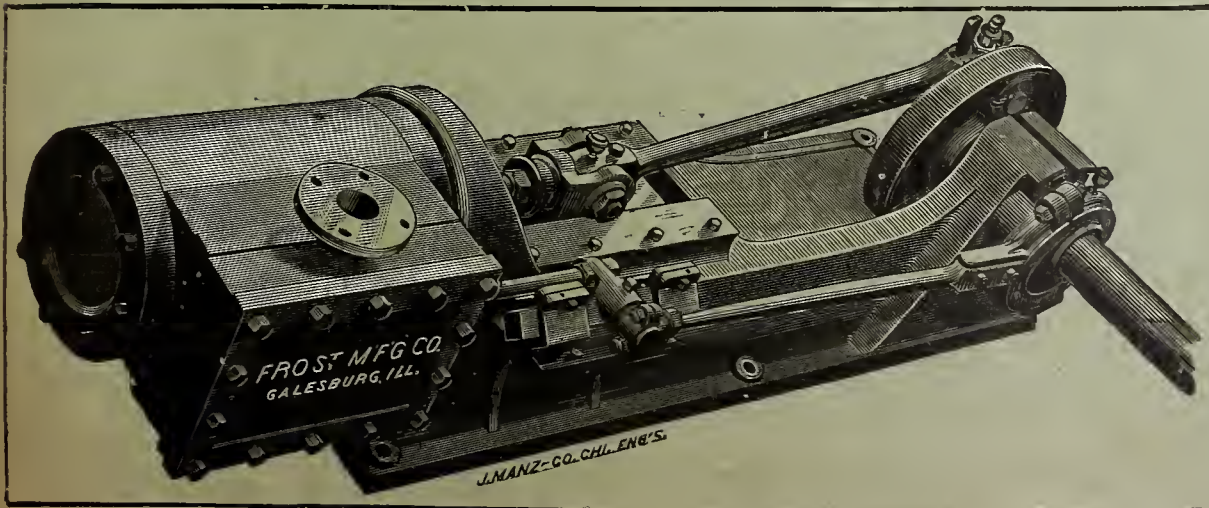
MILL AND ELEVATOR MACHINERY  
ELEVATOR BOOTS  
ELEVATOR BUCKETS  
ELEVATOR BOLTS  
BELTING AND ROPE TRANSMISSION  
SHEAVE WHEELS  
SHAFTING, HANGERS  
SPROCKET WHEELS



SEND FOR CATALOGUE

**THORNBURGH  
MFG. CO.**

110 Jefferson Street  
CHICAGO, ILL.



FOR PRICES AND DISCOUNTS

— ON —

**Elevator Machinery  
AND SUPPLIES**

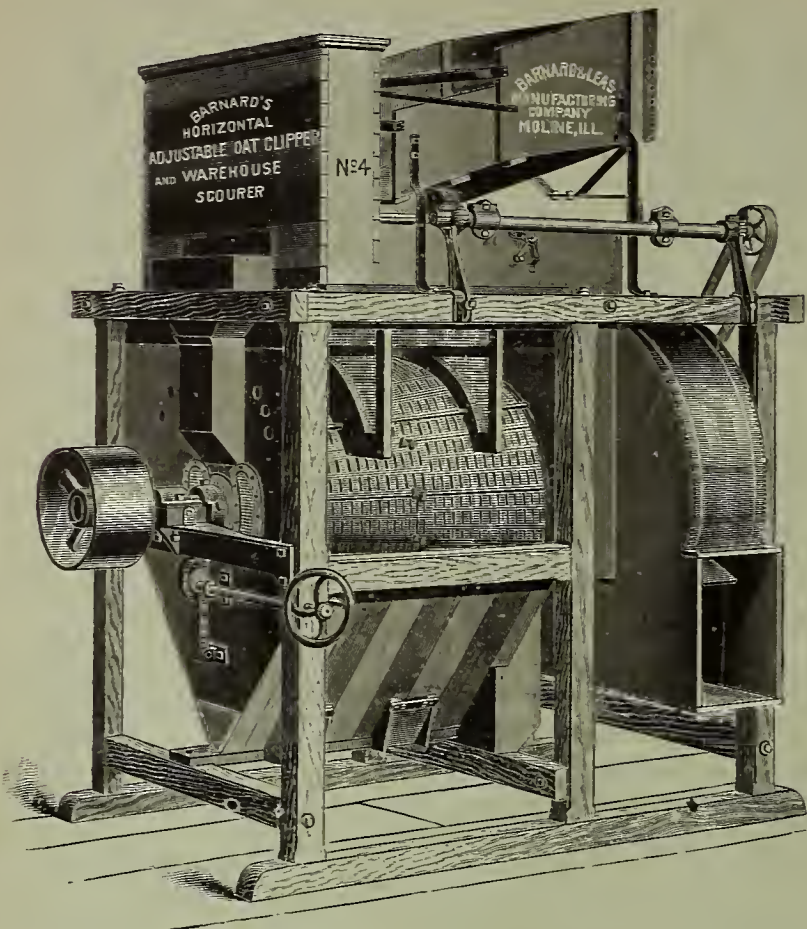
— OF —

**EVERY DESCRIPTION,**

ADDRESS EITHER STEAM OR HORSE-POWER,

**The FROST MFG. CO.,  
GALESBURG, ILL.**





# Smut in Wheat

TAKE  
IT  
OUT By Using

BARNARD'S

## New Horizontal Adjustable Warehouse Scourer

OF LARGE  
CAPACITY.

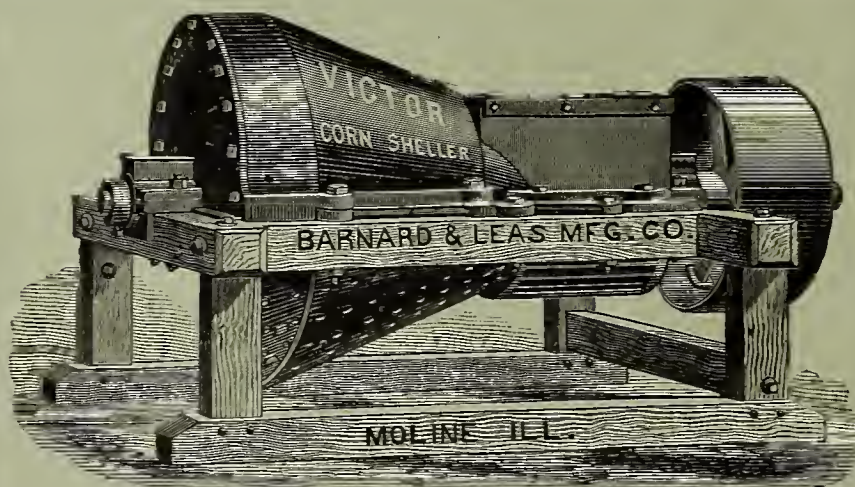
THE BEST SCOURER IN USE.

TRUE  
AND TRIED.

It is Also the Best Oat Clipper in Use.

Corn

Corn



The best outfit for shelling  
it is the

VICTOR SHELLER,

And the best cleaner the

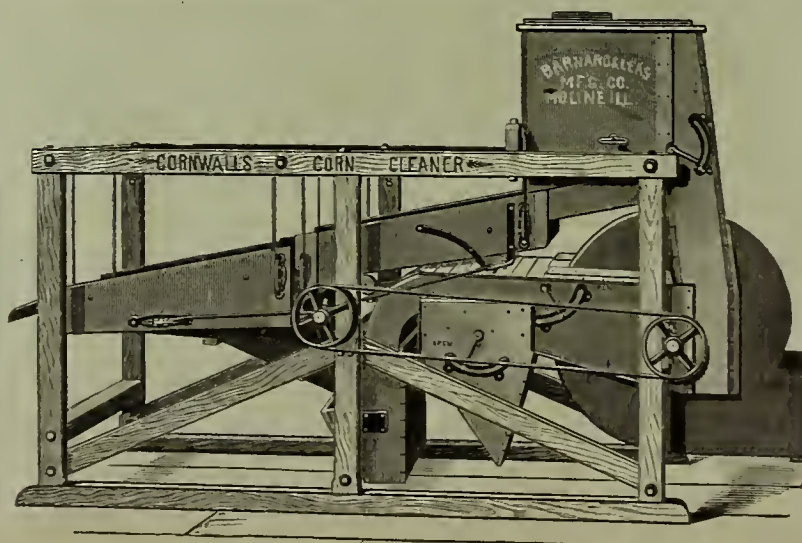
CORNWALL  
CORN CLEANER.

We guarantee them to clean the corn  
for market cleaner than any other out-  
fit on earth. Write for further infor-  
mation to

**BARNARD & LEAS**

MFG. CO.,

MOLINE, ILLINOIS.



Corn

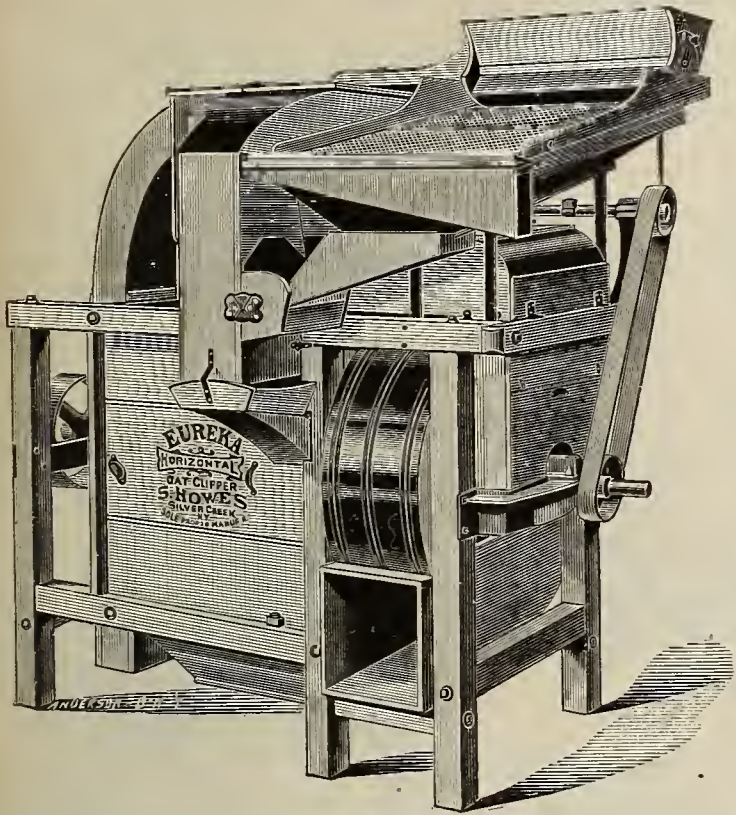
Corn



# EUREKA OAT CLIPPERS CLOSE SCOURERS

**LEAD**—Do Not Follow. ....  
**ARE ORIGINAL**—Not Imitations.

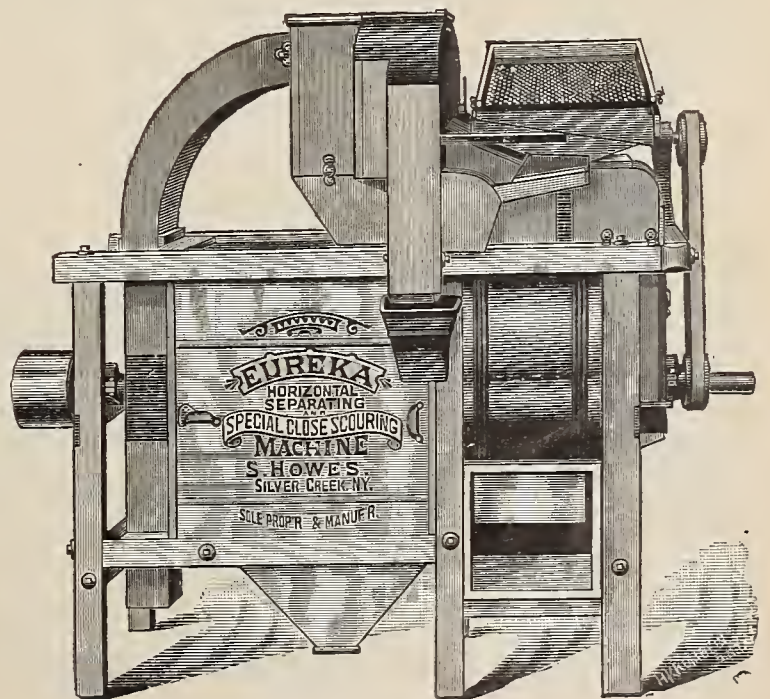
**CLIPPED OATS, TO BE PROFITABLE, MUST  
BE PROPERLY DONE.**



The Eureka Oat Clipper will do this work properly with the least waste. It is the pioneer in the trade and is used almost exclusively in all of the largest oat centers in the country, having displaced many others. Our long experience has enabled us to bring it to such a point of perfection that its work is far above all competitors. Others, modeled as closely as possible after the Eureka, are offered you, but they are not the result of long experience, and in these days of close margins you can't afford to try other people's experiments. You want something that has stood the test of years' service and that will do the most work with the least power. You can find this only in the **Eureka** Oat Clipper. They range in capacity from 10 to 1,000 bushels per hour. While this machine can be used for smutty wheat, remember, we do not offer or recommend it for that purpose. In many things it differs materially from our regular Scourer that we offer for smutty wheat, and we claim that an Oat Clipper that will successfully clip oats will not successfully clean smutty wheat or any other wheat. The Eureka Clipper can be used as a Barley Scourer and will do fine work.

## SMUTTY WHEAT.

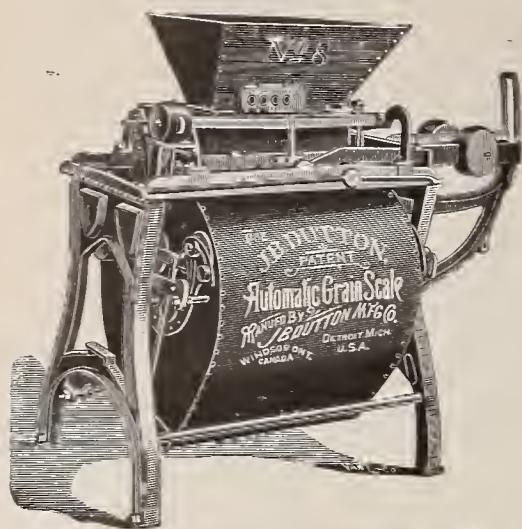
This is the only machine in the world that will thoroughly and perfectly take the smut out of your wheat. Of course, either type, the Upright or Horizontal, of the Eureka Scourer, will do the work. Time and time again has this been proven, and we stand ready to furnish you a machine to try. If it does not do it, you do not have to keep the machine. The almost unprecedented demand this season for these machines, from parties who have carefully looked into every phase of the situation, demonstrates that we are correct. We can furnish you machines in eleven sizes, of almost any capacity required. The only difference in the Upright and Horizontal types is in the manner of drive. Some can drive one better than the other. Both are guaranteed.



**YOUR INTERESTS ARE AT STAKE. WRITE US.**

**THE S. HOWES CO., Silver Creek, N.Y.**





# J. B. DUTTON'S Patent Automatic Grain Scale.

FOR USE IN  
ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES.

SCALES SENT ON 30 DAYS' TRIAL

SEND FOR CIRCULAR AND PRICE LIST.

ADDRESS:

**J. B. DUTTON, 1026 and 1028 Scotten Ave., DETROIT, MICH.**

CONVEYING, ELEVATING,  
AND  
POWER TRANSMITTING  
MACHINERY.



CALDWELL STEEL CONVEYOR.

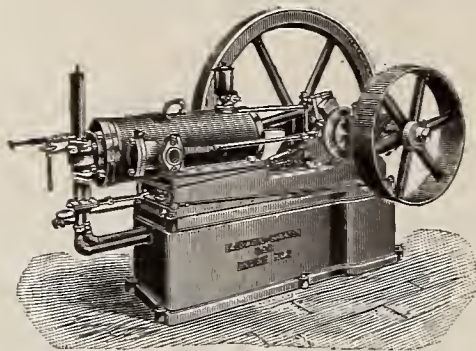
Manufactured exclusively by us at Chicago, with latest improvements.

AUTOMATIC POWER GRAIN  
SHOVELS.  
SOUTH BEND WOOD SPLIT  
PULLEYS.

**H. W. CALDWELL & SON COMPANY,**

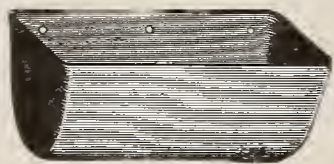
127, 129, 131 and 133 W. Washington St.

CHICAGO, ILL.



SPROCKET WHEELS, LINK BELTING, ELE-  
VATOR BOOTS, BOLTS AND BUCKETS,  
SHAFTING, BELTING, HANGERS,  
PULLEYS, GEARS, CAR  
PULLERS, ETC.

EVERY SEAMLESS STEEL  
ELEVATOR BUCKETS.



**CALDWELL CHARTER GASOLINE AND GAS ENGINES.**

2 TO 75 ACTUAL HORSE POWER.

These engines use gasoline from tanks lower than the engines. They are simple, reliable and safe. We build them substantially, of best material, and we know they are the best engines made.

PLEASE SEND FOR CATALOGUE.

CALDWELL CORRUGATED SEAMLESS  
STEEL ELEVATOR BUCKETS.



## Going to Buy a Scale?

If so, read a few opinions of Prominent Elevator People on the Merits of  
the Demuth Check Beam.

C. A. PILLSBURY, Prest.

G. W. PORTER, Treas. and Mgr.

K. R. GUTHRIE, Secy

ATLANTIC ELEVATOR COMPANY, Incorporated.

GENERAL GRAIN DEALERS. Elevators on Minneapolis, St. Paul and Sault St. Marie Ry.  
J. A. DEMUTH, Esq., Oberlin, O. MINNEAPOLIS, MINN., May 25, 1893.

DEAR SIR:—Replying to yours of the 22d, would say that we have the Check Beams on twelve (12) scales in our Atlantic "A" elevator, and like them very much. We find them a valuable check on the weighman, and good for reference to check up with. Yours truly, K. R. GUTHRIE, Secy.

NEW YORK CENTRAL LIGHTERAGE CO. NEW YORK CENTRAL ELEVATORS.

Gibson L. Douglass, Mgr.

WEST SHORE ELEVATOR.

1 and 3 Beaver Street.

J. A. DEMUTH, Esq.,

New York, May 26, 1893.

DEAR SIR:—We are using nineteen "Check Beams" on the \_\_\_\_\_ scales at N. Y. C. & H. R. R. elevator, and sixteen at the West Shore R. R. elevator. Have discovered a number of errors through their use during the past two years, and consider them a good thing.

Yours truly,

G. W. PHELON, Supt.

ARMOUR ELEVATOR CO., Rooms 1111 and 1112, 205 La Salle Street.

Elevators on C. M. & St. P. Ry., and C. B. & Q. Ry., Chicago. Total Capacity 9,000,000 Bushels.  
J. A. DEMUTH, 40 Elm Street, Oberlin, Ohio. CHICAGO, May 26, 1893.

DEAR SIR:—Yours of the 22d inst. in reference to Check Beams in use on our \_\_\_\_\_ scales. Would say that we have in use 35 of the Check Beams on scales at our elevators, and consider them invaluable for accurate weighing. Yours very truly, ARMOUR ELEVATOR CO.

PADDOCK, HODGE & COMPANY,

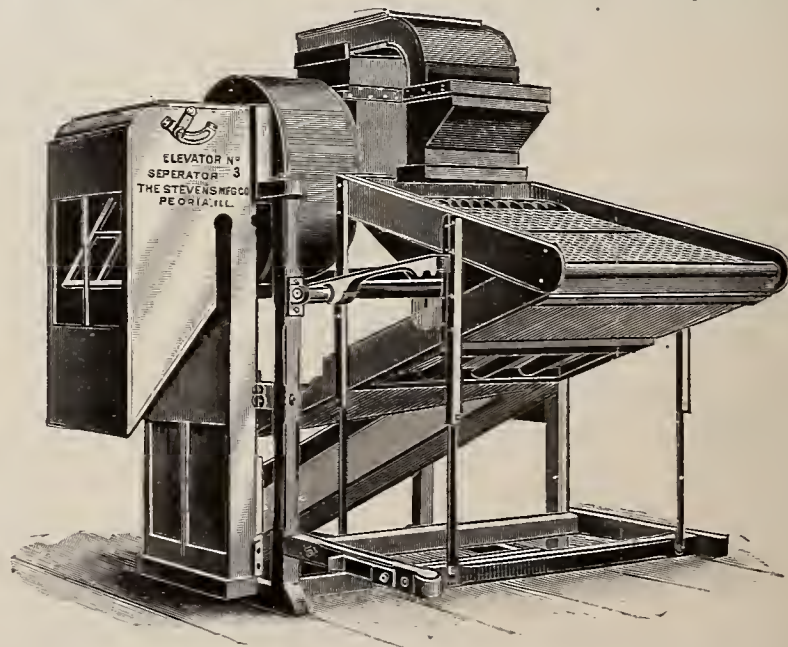
29 and 30 Produce Exchange.

GRAIN MERCHANTS.

TOLEDO, OHIO, June 28, 1893.

DEAR SIR:—In reply to your favor of a recent date: We have had our \_\_\_\_\_ scales supplied with your double entry system since last November, and in errors detected and corrected, for and against us, it has more than paid for itself, to say nothing of the satisfaction of knowing that our weighman's entries are absolutely correct after they have been balanced up by your system. Dictated by J. H. Yours truly, JAMES HODGE, Secy. and Treas. Toledo Elevator Co.

## Stevens Dustless Warehouse Separator.

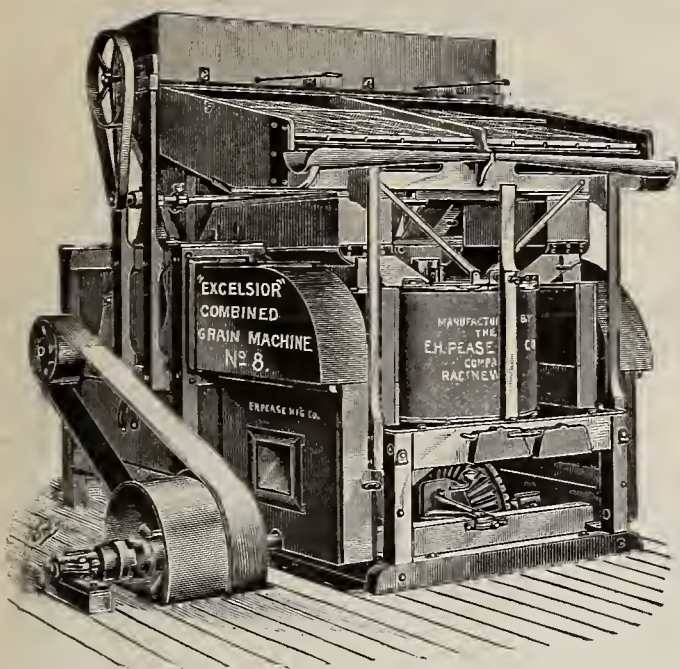


This machine is designed for warehouses or elevators of medium capacity. It has every feature to insure perfect work. No grain or chaff can be drawn into the fan and hurled into the dust room or out of doors. By the use of the proper perforated sieves, this machine will clean perfectly wheat, rye, oats, barley, buckwheat and peas.

Built in five sizes. Send for catalogue, description and prices. We sell all our machines under guaranty. Address

**THE STEVENS MILL & ELEVATOR MACHINERY CO., Peoria, Ill.**





## NEW MODEL THE EXCELSIOR COMBINED GRAIN MACHINE DUSTLESS

Can be used independently, either as

An Oat Clipper, A General Grain Cleaner, A Grain Polisher,  
Or the Most Perfect Mixing Machine in the Market.

MADE IN SEVERAL SIZES, FOR COUNTRY ELEVATORS OR CITY CLEANING HOUSES.

This is the original Oat Clipper and the first ever placed on the market. It has never ceased to rank superior to all others, and in latest improvements is strictly up to date. Its automatic force-feed is perfect. It is absolutely dustless, and when used in either capacity named above it is perfect and complete. The combinations not conflicting in any manner, and when used in either capacity it may also be used either to grade or mix grain, or as both a grader and a mixer of grain.

This is, without a doubt, the most practical, as well as the most desirable and profitable machine which can be placed in an elevator or cleaning house, and it is the only general purpose grain machine on the market.

To the operator of country elevators, transfer, or cleaning houses we particularly commend this machine; where room is limited, and it is impossible to devote the space required for a variety of machines. While an Oat Clipper or a Grain Polisher is oftentimes an exceedingly profitable machine, yet there are periods when such a machine, owing to the condition of the crops or the markets, might remain idle for a time; but this machine as a separator and cleaner is always not only desirable but necessary.

### The "Excelsior Junior" Oat Clipper and Separator, or Grain Polisher and Separator.

This machine is dustless, and is similar to our "Excelsior" Combined Grain Machine, with the exception that it cannot be used as a Separator only.

For clipping oats, polishing wheat or barley, and for mixing grain, the "Excelsior Junior" cannot be excelled; and while the grain is undergoing either operation, it can also be cleaned as much or as little as the operator may desire.

The feeding device is simple and can be accurately adjusted to maintain an even and steady flow of grain over the entire width of the sieves.

The sieves and screens are conveniently arranged so that proper combinations of sieving can be put in to suit the requirements of the work being done.

The quality of the clipping of oats, or polishing of grain, is governed by the weights shown at the front of the machine; moving the weights toward the ends of the valve rods causes the cylinder to do closer or better work. This adjustment can be made to any desired degree while the machine is in operation.

The valves which control the volume of air passing through the grain can be adjusted so as to clean the grain as little or as thoroughly as may be desired, and to save all light grain, oat hulls, seeds, etc., which may be of value.

Hundreds of these machines are doing daily duty in country elevators as well as the largest cleaning houses of this country. They have been adopted by the Russian Government and placed in immense Governmental Elevators of nineteen of the largest cities of that country.

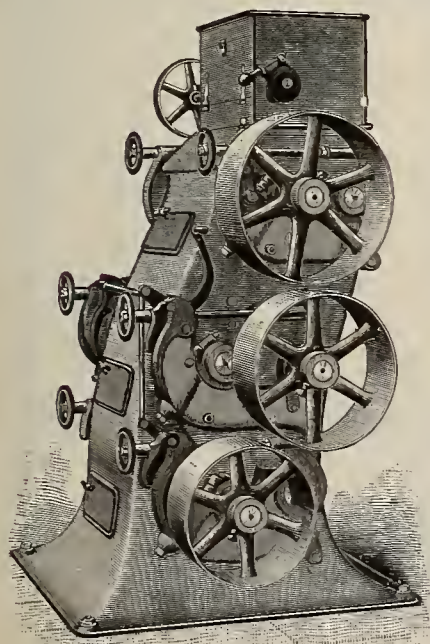
Consult your best interests and write us.

**E. H. PEASE MANUFACTURING CO., RACINE, WIS.**

**NORDYKE & MARMON CO., Indianapolis, Ind.,**  
Flour, Corn and Elevator Machinery,

QUALITY TO SUIT THE MOST EXACTING.

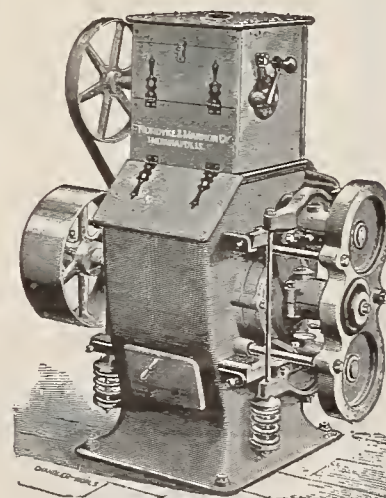
PRICES TO SUIT THE TIMES.



Three Pair High Six Roller Mill.

*Corn Shellers,  
Grain Cleaners,  
Flour and Bran Packers,  
Flour Feeders and Mixers,  
Portable Buhr Mills,  
Hominy Mills,  
Wheat Heaters,  
Scales,  
Shafting,  
Pulleys,  
Elevator Supplies.*

*Hangers,  
Boxes,  
Gearing,  
Belting,  
Steel Conveyors,  
Wood Conveyors,  
Link Belt,  
Sprocket Wheels,  
Engines and Boilers,  
Water Wheels,*



Three-Roll Two-Break Corn and Feed Mill.

TEN SIZES and STYLES of ROLLER, CORN and FEED MILLS.

No doubt about the volume of our voice if price and merit talk, and what we say will be interesting if you intend to buy.

Write Us Saying What You Want.

**NORDYKE & MARMON CO., - INDIANAPOLIS, IND.**



# GRAIN JEWELS

## *The Monitor Dustless Elevator Separators.*

During the last five years all of the leading cleaning elevators built in the United States, with but two exceptions, adopted the **MONITORS**.

COMMENTS ARE UNNECESSARY.

## *The Monitor Oat Clipper.*

This machine has no superior—in fact, no equal. It has only to be tried to demonstrate its value. Where oats are handled it is a necessity. It has many points of vantage over all other makes.

**1st: IN QUALITY OF WORK.      2d: IN SAVING OF POWER.**

## **SMUTTY WHEAT.**

The Spring wheat crop this year is a very smutty one, and it is a problem with grain handlers how best to handle it. We offer a machine for this purpose that will do the work, and do it in such a thorough manner that it will appeal at once to the business sense of

**EVERY ELEVATOR OPERATOR.**

This is the most profitable machine ever placed in an elevator where smutty grain is received.

## *The Monitor Malt Cleaner*

Is the only satisfactory machine made that will economically clean malt.

**IT WILL NOT INJURE THE MOST TENDER MALT.**

These machines are all *Jewels of the First Water*, and you will find it to your interests to write us for particulars.

# HUNTLEY MANUFACTURING COMPANY,

SILVER CREEK, NEW YORK.

A. F. SHULER, Northwestern Agent, 420 Third Street South, Minneapolis. Minn.





A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY,  
(INCORPORATED.)

VOL. XIV.

CHICAGO, ILLINOIS, NOVEMBER 15, 1895.

No. 5.

ONE DOLLAR PER ANNUM.  
SINGLE COPY, TEN CENTS.

### GRAIN FROM SWAMP CANES.

It has been many centuries since a new edible grain was discovered, and a longer time since a new one was developed. The latest discovery in this line until recently was the corn which the early explorers found in the possession of the American Indians. The Indians had cultivated it so long that they could not tell where they got it.

During the last season what is claimed to be a new edible grain has been discovered near Pittsboro, Russell County, Ala. Pitts Bros. of Pittsboro, recently sent us a sample of the new grain of which we herewith give a graphic representation. They write us that "There were thousands of bushels of this on cane this year. Something we never saw before."

Our illustration shows the grains full size and most of them have the outer husks on. The shorter ones near the center of the cut are without their husks, but have a light brown hull which can be peeled off. When the hull is peeled off, it exposes a very bright white surface. The grain is very hard and crumbles when cut with scissors. When peeled the grain looks and tastes very much like starch. From the samples received we are led to think the grain grows in a head at the end of a stalk like oats and wheat. The Herald of Columbus, Ga., says: "The common swamp canes—the ones used for fishing poles—are fairly loaded down with grain, corresponding in shape and taste to the oat. The grains are two or three times as large as oat grain and contain a germ or starchy substance very pleasant to the taste. Horses eat the grain in preference to corn or oats. Hogs fatten on it readily, and chickens devour it with avidity. Inquiry among the oldest inhabitants show that such a thing as cane bearing seed has never been known within their knowledge. If such a thing has occurred it has been confined to an occasional cane, which was regarded as a queer freak of nature and failed to attract more than passing attention."

"Another queer feature of it is that the seeds are only found on cane on Hatcheehubbree Creek for a

few miles around Pittsboro. While it is true, there is an abundance of it there—millions of bushels—our informant says. Farmers in that section readily recognize the value of the grain and have employed all the hands they can get to gather it, which is a very simple process. Sheets are put down on the ground and logs or rails placed on them. The cane is then thrashed against the rails and the grain falls out readily, when it is removed from the sheets and placed in sacks. It is then used as feed for stock.

"So far no attempt has been made to make bread

of the world. Others say that the seed will grow more cane, which, in turn, will bear seed. If this theory is correct, the discovery will be equally important, if not more so, as all the cane brakes and swamplands could be reclaimed, and would yield an immense annual harvest. Those who have seen the cane growing with the seed on it say that every stalk is full from where the foliage first begins to the top. The seed is on the little and big cane alike, and the stalks are so heavy with the grain that most of them are bowed down to the ground. One gentleman expressed the opinion that many single stalks would yield fully a peck of grain."

We have sent samples of this grain to the Illinois Agricultural Experiment Station, and experiments will be made with the grain to determine if it will germinate. If any of our readers can give us any information about this new grain we would be pleased to hear from them.



GRAIN FROM COMMON SWAMP CANES.

from the grain, but those who have examined it carefully say there is no doubt but it can be ground and made into nutritious and palatable bread.

"Much of the grain being gathered will be kept and planted on various kinds of soil as an experiment. No one can foretell what the result will be. The cane ordinarily propagates from roots. But the seeds have a germ, and this germ will certainly come up. Here is where the speculation comes in. What will be the result when the seeds are planted? Some say that they are nothing more nor less than oats which have crossed in some way with the cane.

"Those who take this view of it claim that the seed will germinate and develop a plant similar to the oat but larger and more prolific. If this is correct, there will be a revolution in the grain stuffs

familiar with terminal elevator facilities would be led into thinking this would be a good thing, says the Commercial Record of Duluth.

As regards dirt having any influence whatever in determining grades is utterly untrue. 50 per cent. of dirt in a bushel of wheat would be reckoned as so much dirt, and the wheat would be graded at its true grade the same as if free from dirt. The only possible way in which grades could be raised would be by blowing out smut, and the less smutty wheat is handled before coming to market, the better for the seller. Even the terminal elevators with the best and latest machinery built will often lower grades in attempting to free them from smut in it. Again no one who has made the least investigation of the subject would make the statement that \$6 to \$12 per car would be saved in freight. Why that is equal to probably 15

### PAYING FREIGHT ON DIRT.



per cent. of the total freight, or in other words equal to saying that every bushel of wheat carries from 7 to 10 pounds of dirt. As a matter of fact, two pounds is an excessive and unusual dockage, and three-fourths to a pound is the average, but even saying that the average is 2 per cent., the freight on the dirt would be less than \$1.50 per car, as the average freight is less than \$75 per car. Anybody can tell how far \$1.50 would go in cleaning a car of wheat. The best two men with a hand machine could do would be one car in two days, and it would result in a positive loss for a country elevator to handle it for less than  $\frac{3}{4}$  of a cent a bushel.

Again, after getting it cleaned, nothing could be done with the screenings but to burn them, as no sane man would feed them to cattle and thereby perpetuate his crop of weeds.

It is barely possible that as regards flax the question of country cleaning would be investigation as the dockage is very heavy on this grain running from 10 per cent., which is a fair average, to 40 to 45 per cent. in extreme cases. But even in this case perfect machinery is required to clean it, and it is cleaned several times before finally reaching the crusher. But as for cleaning wheat in the country to save freight charges on dirt it is a fallacy pure and simple.

### THE LONG AND SHORT HAUL QUESTION.

It is announced that all the prominent western roads have been notified by the Interstate Commerce Commission of the beginning of an action against them for violation of the fourth section of the interstate commerce law, better known as the long and short haul clause. A prominent agent of one of the leading western roads is quoted as remarking on the impending prosecution that the evil referred to no longer exists, and that the waking up of the commission means not so much as even a reprimand. This is a somewhat misleading view of the situation. In point of fact, the long and short haul clause has been a dead letter for some years, but it has been so, not by the consent of the commission, but by the action of the courts. The law vests in the commission the power to suspend this section of the law in particular cases, but under the judicial interpretation of the section the railroads have been able to suspend its operation without asking leave of the commission.

The section in question was passed for the purpose of preventing railways from charging for a shorter distance a greater sum than is charged for a longer distance, thus compelling them to give to intermediate points the advantages of low rates to competitive points. The compulsory part of the section was rendered virtually inoperative by a decision rendered early in 1892 by the United States Circuit Court in Chicago. It was therein held that the meaning of the word "line" in this fourth section of the act is limited to one road, and that two connecting roads made a traffic instrumentality other than a line. In short, the word "line" does not refer to the physical route over which the transportation is conducted, but to the road of the special railway which is subject to the act. Under that decision, to quote from one of the legal commentators, "short haul charges greater than rates over both the connecting lines to terminal points are held not to be obnoxious to the interstate commerce law, inasmuch as the latter rates are made on an arbitrarily agreed line, and not on the physical structure of a single railway known as a line."

This ruling has naturally made the application of the fourth section of the law dependent upon agreements as to rates between different carriers. Equally, as a matter of course, it has contributed to the bringing back of preferences and discriminations as to localities, "on the theory that they arose on lines independent of the physical structure and under combined control." It has thus been possible, by the simple making of a joint tariff, to create an exception from the operation of the long and short haul clause in favor of part of the traffic which goes on joint rates.

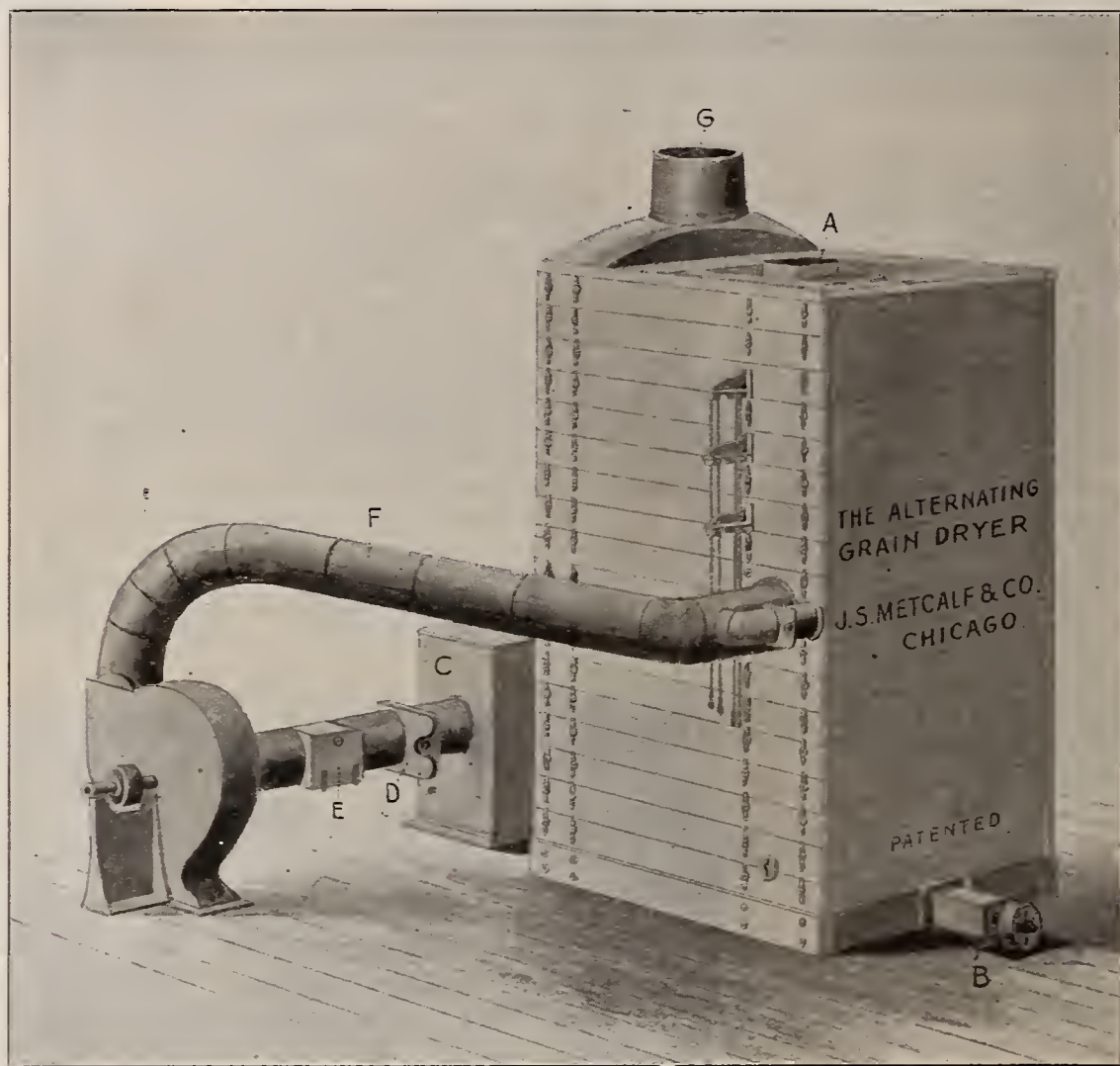
### THE ALTERNATING GRAIN DRYER.

The demand for dryers has been growing rapidly of late, due principally to the fact that those connected with the grain trade have learned that what they were throwing away can be saved and that much of their other grain can be improved. It is natural that this growing demand should be followed by an increased supply and we have to announce that J. S. Metcalf & Co. of Chicago are now ready to supply their Alternating Grain Dryer which is illustrated herewith. This dryer was used with remarkable success at Toledo last winter when nearly 175,000 bushels of the wet wheat which had been in elevator "B" at the time of its destruction were reclaimed and put in merchantable condition. After the grain had been put through this machine very little of it smelled of smoke although all of it smelled strong of smoke before.

It is claimed that the Alternating Dryer will dry all grains perfectly and leave them in their natural

grain remains at rest when in this chamber but of course does not fill the underside of the inverted troughs or ducts. As the hot air comes into the central duct from the hot air chamber it escapes from the lower side and passes through the grain to the four outlet passages and thence into the exhaust chamber. In passing through the wet grain the hot air gathers the moisture and carries it to the exhaust chamber and outside.

When hot air has been passed through the grain long enough to dry it thoroughly it is shut off at D and the trap E is opened. The cold air is then blown through the grain and it is put in condition for storing. In case the grain to be dried does not fill the bin, the ducts above the grain are closed by valves. The time required to dry and cool grain depends upon how much moisture it contains, but as a rule this dryer will reduce the moisture 5 per cent. in two to two and one-half hours. The manufacturers of this new dryer claim that it is under the control of the operator at all times and that if grain is not damaged otherwise than by moisture it can be



THE ALTERNATING GRAIN DRYER.

condition. It is very simple in construction and operation and will not get out of order. The dryer consists of a bin or box divided into three chambers. The small double chamber in the right side of the bin, as shown in the illustration, is the hot air chamber into which hot air from the steam coils is forced by the fan, through the pipe F. The small chamber in the left side of the bin is the exhaust chamber into which the moisture-laden air is discharged after passing through the wet grain in the large center chamber which is known as the drying chamber. The grain is placed in this chamber through the opening A and discharged through B.

The middle chamber contains a number of ducts for the passage of the air from the hot air chamber to the drying chamber and from the drying chamber to the exhaust chamber. These ducts are shaped like inverted troughs, placed parallel with one another and arranged in the order of a quincunx. Half of these ducts connect the drying chamber with the hot air chamber and the other half connect it with the exhaust chamber. They are arranged in alternating rows and each duct leading from the hot air chamber is the center duct of a group of five, or quincunx of ducts. The

restored to grade even if thoroughly saturated. If musty grain is not in an unusually bad condition this dryer will remove all must and put it in perfect condition. By treating the grain while in the dryer with a limited amount of steam at the same time that the hot air is being forced through it, and then thoroughly drying the musty grain, the must will be removed and the grade of the grain raised. New corn can easily be made to grade old corn and heating corn is readily restored to its normal condition. Working on a crop of corn containing a large percentage of moisture or upon grain that has been wet, this machine would pay for itself in a very short time.

The unusually large crop of corn will no doubt induce many farmers to make the kind of haste in harvesting their corn that in the end means waste. Corn that heats in the crib is sure of being lost, and every bad ear spoils its neighbor, as certainly as does a rotten apple in a barrel. Dealers should be certain that the corn is thoroughly cured before beginning cribbing. It must be husked, cleaned and thoroughly sheltered from the weather. The leaving of the silk on the corn is like offering a premium to mice to take up their abode in the crib.



## GROWING GRAIN UNDER DIFFICULTIES IN ENGLAND.

Free trade in corn has quite unwarrantably been elevated into a sort of fetish, but there is no inherent virtue in the taxation for revenue purposes of tea rather than of corn, remarks the Morning Post of Liverpool. The present flooding of our markets with cereals from all parts of the world was never contemplated either by Sir Robert Peel or by Mr. Cobden, and it would be absurd to hold ourselves bound to a particular customs tariff if its alteration would prevent the cornfields of the country from being turned into waste land.

But when we have the two facts that in the first place the farmers in protected countries like France are no better off than our own cultivators of the soil, and in the second place that the palmiest days of British agriculture were between 1867 and 1877, when, notwithstanding free trade, wheat still fetched remunerative prices, we may regard the revival of protection as outside the range of practical politics. Then, what remains? Are we to be content to see what used to be the finest wheat lands in England either altogether abandoned or allowed only to furnish the scanty crop of grass, for which, by the way, they are by no means well suited?

The Duke of Devonshire indicates three directions in which relief might be sought, viz., the decrease of burdens on the land, the reduction of railway charges, and increased security of tenure, and something may doubtless be done in this direction. But, to take the first of these remedies, it is not too much to say that if half the rates could be abolished to-morrow, and the Chancellor of the Exchequer were able to supply the money required from some new source of taxation, corn still could not be grown at a profit at present prices.

## A SQUINT-EYED VIEW OF THE ELEVATOR MAN.

The idea that the elevator interest prospers at the expense of the milling industry is a popular one among millers, who are prone to point out, as an argument in its favor, that wherever the iniquitous elevator man has thriven, there, in a corresponding degree, has the miller's fortunes waned. To paraphrase the poet, the flour makers might say:

"Ill fares the town  
To hast'ning ills a prey,  
Where wheat men flourish  
And the mills decay."

We do not, for one moment, attempt to deny that we have upon occasion, added our mite of words and music to the popular song so often sung in the past, nor will we abate one jot of our argument in the miller's favor, says the Northwestern Miller. Still, we will admit that there are two sides to every story, and, while the circumstantial evidence in the case is certainly in favor of the miller's theory—for elevator people have flourished while the millers waxed thin—this may, perhaps, be a mere coincidence, and the real reason of the miller's undoing be far removed from the suspected quarter. We would like very much to think so, for the elevator men we know are almost invariably good fellows, and we dislike to think of their success as being in any way built upon the ill-fortune of others.

Among the millers it is commonly said that the elevator man "toils not, neither does he spin;" that others labor to increase his riches, and that, practically, all he does is to hold the bag while the hard-working miller gathers up, by constant labor, the wherewithal to fill it. This may be true, but yet all elevator men are not millionaires.

There may be justice in the miller's claim, that when the elevator interest grows so great that it completely dominates the market, and the elevator man is able to control the situation almost absolutely, the miller, being at his mercy, has but a small show for profits. Nevertheless, little blame can attach to the elevator man, in these days when success means the ability to dictate terms, if, seeing his opportunity, he avails himself of it. Doubtless, if the miller could do the same thing, no

considerations of modesty would keep him from it. Therefore, while we may deplore the tendency to dominate which we imagine we see in the elevator interest, as at present conducted, we cannot, and do not, on that account, judge the elevator man harshly. He, after all, even when the worst is said of him, is merely fulfilling his destiny, and, viewed from the miller's standpoint, it is a very pleasant destiny to fulfill. It may be said of the elevator man, as Mr. Sicary, in "Hard Times," said of the circus people of whom he was a type: "You must have us, squire. Do the kind thing, as well as the wise thing, and make the best of us—not the worst." Possibly if the miller would make the best of the elevator, and, perhaps, work more in harmony with its owner, it might be mutually beneficial.

## THE HERZER ELEVATOR AT PAULDING, OHIO.

In response to the query published in the October number of the AMERICAN ELEVATOR AND GRAIN TRADE asking for a description of a small elevator with equal facilities for handling corn and small grain the Herzer Elevator Co. of Paulding, O., have sent us a photograph of their house shown in the engraving. The main building is 30x62 feet, 40 feet



THE HERZER ELEVATOR AT PAULDING, OHIO.

to square. The basement is 7 feet high, working floor 9 feet high and bins 16 feet in the clear. The basement contains a cornsheller and sinks for the three elevators. On the working floor is the line shaft wheat smutterm and a small seed cleaner. The house has 11 bins, 3 of them hold 3,500 bushels each; the other 8 hold 800 bushels each. The bin story is built of 2x5-inch stuff. All grain is elevated to a 600-bushel hopper scale on same level with the bins and is then loaded into cars. A space 14x30 feet up-stairs is used as a seed and wool room. In the lower part is the office which is 14x16 feet.

The driveway contains wheat, oats and corn dumps. The grain falls into hoppers and is worked by slides and fed onto endless belts which carry it to elevators which hoist it to the top of the tower, where the turntable runs it into any bin required. The corn dump contains a cornfeeder that works it out onto a belt which feeds at the rate of 250 bushels per hour into the cornsheller, where it is shelled and cleaned. It is then hoisted up-stairs where it is again recleaned and run into bins.

The elevator is operated by a 30-horse power engine situated in a detached building 20x62 feet, 18 feet high. This house contains a large bin which holds 2,000 bushels of corn cobs which are used for fuel, also a water tank, well, fire pumps, hose, etc. All the buildings are steel clad, have metal roofs and are fire proof from the outside.

The elevator can handle 3,000 bushels ear corn daily, shell and clean it, and 3,000 bushels of other grain. The whole is put up in a substantial man-

ner and has all the modern cleaners, smutterm, feed mills, scales and elevators now in use. The plant cost \$8,500. The insurance costs \$2.25 per \$100, which is as low if not lower than in most places where fire protection is one-half better than in Paulding. The Herzer Elevator Co. has a duplicate of this plant at Haviland, O., only smaller being 24x40 feet. The Herzer Elevator Co., of which B. Herzer is president, deals in grain, seeds, wool, hay and mill feed.

## THE METRIC SYSTEM OF WEIGHTS AND MEASURES.

No cause, since the earliest organization of civilized society, has contributed more largely to embarrass business transactions among men, especially by interfering with the facility of commercial exchange between different countries, cities or individual citizens of the same country, than the endless diversity of means employed to determine the quantities of exchangeable commodities, writes W. H. Stilwell in Milling. For the inconvenience and confusion resulting from this course but one effectual remedy can possibly be suggested, and that is the general adoption throughout the world of one common system of weights and measures.

Such a common system is offered to us in the metric—a system according to which the weight and dimensions of every material thing, whether solid, liquid, gaseous, whether on land or on water, whether in the earth or in the skies, and whether determined by the scale, plummet, balance, barometer or thermometer, are ascertained by a method absolutely uniform, entirely simple and equally suitable to the use of all mankind, resting upon a single invariable standard of linear measure, with multiples and sub-multiples like those of our monetary system, exclusively decimal, with appropriate names, similar in all languages, and itself secure against the possibility of change or loss through carelessness, and copied for distribution among the different nations of the world.

A system of weights and measures born of philosophy rather than of chance is what we now seek. To this end, old systems must be abandoned. A chance system cannot be universal; therefore, what is produced by science may find a home everywhere. The metric terms are equally intelligible in all languages. They are in their nature common or cosmopolitan and in all countries the name instantly suggests the measure with exquisite precision.

The old systems were as various as the nations that used them. If the standard had always been the length of the foot of their several kings, the variety would hardly have been greater. More than one hundred foot measures, each differing from all the rest, have been in use in Europe. At



the beginning of the present century the foot had not less than sixty values in Europe. There is great encouragement in the progress already made in uniformity. The metric system is now adopted by the Swiss, Swedes, Spaniards, Germans, Austrians, Italians, Portuguese, Dutch, Danes, Belgians, Greeks, Mexicans, Brazilians, and by most of the South American states and in British India, and in a majority of these nations its use is compulsory.

It is strange that our country, which has cut loose from so many bondages of medieval or modern precedent, should be distanced by so long a list of nations, and even by the weaker republics of our own continent, in the establishment of the metric system. It is strange that a nation which in 1776 commenced a career of progressive policy which led soon thereafter to the construction of an admirable decimal system of coinage should not at that time have adopted a decimal system of weights and measures, as Jefferson desired. But it is yet more inexplicable that after more than a century the antiquated system should be found still prevailing, in unpleasant contrast with the admirable scale by which the French, German and other European nations measure and weigh their goods. Had the advice of Jefferson been heeded the metric system might easily and naturally have been introduced here in connection with our decimal cur-

price you wanted to get it at." Men who will act in this way, after selling goods and signing contracts to deliver them at a stipulated price, must possess a very obtuse idea of business integrity. Dealers say that their transactions with farmers, as a rule, are very onesided; for if prices advance after they have sold their produce, they will either fail to deliver it, or as little of it as possible, in order to resell at a higher figure. Of course there are farmers whose word is as good as their bond, and who do not need contracts to carry out their deals to the letter; but it is regrettable that there are so many who fail to carry out their written agreements and resort to the meanest devices in breaking bargains, if by so doing they can gain a few dollars. If the market subsequently declines below the figures these slippery farmers sold at, they are eager enough to deliver a good deal more merchandise than was agreed upon, and will crowd all they can upon buyers. The validity of some of these written contracts is about to be tested in our courts of law, and if those farmers who resold their hay at higher prices than they contracted to deliver to the original purchasers, are compelled to make delivery of the hay as per contract, and in order to do so are forced to go into the market and buy it at the advanced rates, they may yet discover that the repudiation of written contracts is an expensive affair.

### THE EXCELSIOR COMBINED GRAIN MACHINE.

Many elevator men seem to be convinced that this is a year above all others for the profitable clipping of oats because of the difference in price between No. 2 White and No. 3 White oats and between No. 3 and No. 3 White. By clipping and cleaning oats the shipper gets the full benefit of the market. The shrinkage caused by removing the hulls, screenings and foreign matter can no longer be considered a waste as the mustard seeds can be separated and saved. Mustard seed is as marketable as the grain or other seed from which it is removed, and at present is worth about 62 cents per hundredweight on track at Chicago. The light grain and other seeds can be mixed with other grain and ground into feed. Oats raised in flax growing districts this year contain so much mustard seed that buyers are testing and docking all oats with mustard in. Some country shippers who are taking the mustard seed and dirt out of the oats and clipping the oats claim to have paid for the necessary machine in less than four months from the proceeds of mustard seed sold.

Few shippers have bought oats of good color which they thought would grade No. 3 White and then found much to their disappointment that the admixture of seed made it grade No. 3. The removal of the seed would have cost little and greatly increased the returns. The Excelsior Combined Grain Machine, illustrated herewith, has been greatly improved and is now used for clipping oats, cleaning smutty wheat and for cleaning, polishing and grading wheat and barley and is also used as a general dustless elevator separator for cleaning all kinds of grain and seed. This machine is dustless and can be used to either grade or mix grain, or both. It is a great success as an all-around grain machine.

In country elevators and other houses where the operators wish or are compelled to economize in space and expense for machines, this combined machine has met with favor. The condition of grain or markets sometimes makes a clipper or a polisher a very profitable machine and at other times less profitable, while a cleaner is always of value, so when a combined machine is put in it can always be kept at work.

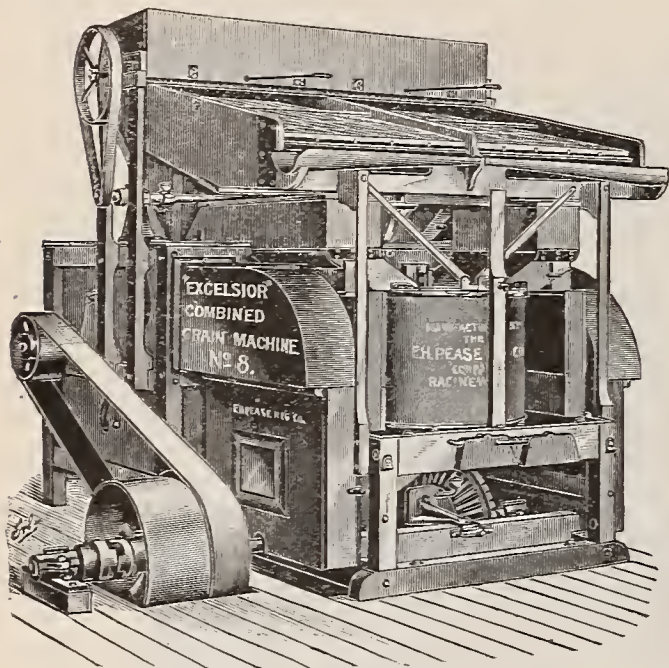
The Excelsior Combined Grain Machine can be easily and quickly changed from a receiving separator or a separator and grader to an oat clipper, separator and grader or to a grain polisher, separator and grader. It will polish, clean and grade wheat or barley at one operation and raise the grade of low grade, damp or musty wheat.

This machine has a positive force feed which at all times regulates the flow of the grain

and keeps it spread evenly over the entire surface of the sieves. The sieve surface is large and the sieves conveniently arranged for cleaning different kinds of grain. The suction fan and the air trunks are arranged with valves to give the operator complete control of the air passing through the grain, so the grain can be cleaned as little or as thoroughly as desired. When used as a separator and grader, or as a separator only, the oat clipping or grain polishing cylinder and the parts connecting it to the main drive pulley are at rest, so extra power is not required.

When it is desired to use this combined machine as a grain mixer the different grains are spouted into the hopper of the machine, and from the sieves it is passed through the cylinder with very little pressure upon the valves. By this handling it is said to be thoroughly mixed.

The main driving pulley, which may be placed on either side of the machine, is crowned to receive the belt from the pulley on the line shaft and also for the main driving belt of the machine, a flange being provided for separating the belts. The main drive pulley is provided with a clutch coupling which can be thrown into mesh when it is desired to use the machine as an oat clipper, grain polisher or as a mixer, and power is imparted to the gear which drives the cylinder. Power is supplied to the bal-



THE EXCELSIOR COMBINED GRAIN MACHINE.

rency. Had it been generally taught in our schools fifty or even twenty years ago, the main objections to its use would no longer be heard. If, like Germany, we now prepare the way for it through the vast and effective machinery of our schools, it will, at no distant day, supplant our present system, and leave it shelved in encyclopedias, with the other curiosities of the feudal ages, where it belongs.

### FARMERS WHO FAIL TO DELIVER GRAIN SOLD.

The manner in which many farmers repudiate contracts made under their own signatures, whenever it suits them to do so, is surprising, and exhibits the loose business methods which obtain among our agricultural community, says the Montreal Trade Bulletin. A number of instances have recently come to light in which farmers sold their No. 2 hay at \$8.50 and \$9.00 delivered at country stations, and entered into contracts after the following style:

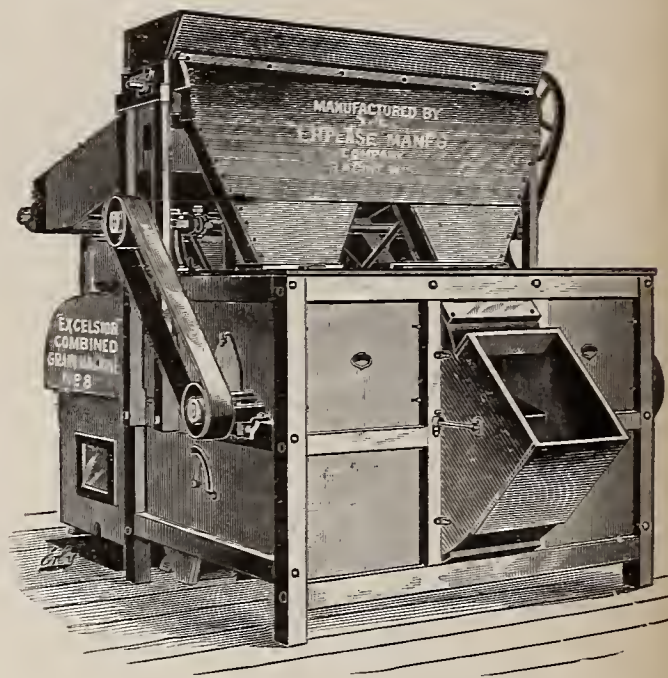
Oct. —, 1895.

I have this day sold to A. B. 50 tons of hay for delivery at — station at \$8.50.

Signed,

C. D.

When the purchasers went to take delivery of and pay for the hay, at the time agreed upon, they were informed in the coolest manner possible that the hay had been resold to other parties who paid a higher price for it. Some treated the matter so lightly, that when buyers demanded delivery, the former simply laughed, with the remark: "Oh! the market has advanced 50 cents to \$1.00 per ton, and I was not bound to deliver the hay at the



THE EXCELSIOR COMBINED GRAIN MACHINE.

ance of the machine by the belt which runs from the main drive pulley to the fan shaft pulley.

When no work is required of the cylinder the grain being cleaned is passed through the trunks at each side of the machine without passing through the cylinder. The work of the cylinder when clipping or polishing grain is regulated by moving the weights on the valve rods and thereby the operator can graduate the degree of clipping or polishing to the exact point desired without stopping the machine.

The positive force feed used upon this machine consists of a corrugated roller with adjustable valves. The roll is driven by a belt and forces an even and steady flow of grain across the entire width of the sieves. When once adjusted the feed is regular and can not be clogged by straws, strings, nails or other foreign matter. The machine is made by the E. H. Pease Manufacturing Co., Racine, Wis., who will furnish any information desired.

It is said that a large amount of Mexican corn will be shipped over the Central Mexican Railway to the United States, an almost unprecedented transaction.

The case of E. E. Bosworth & Co., Urbana, Ohio, grain dealers, vs. Kelly & Kelly, grain dealers in this place, wherein suit was brought for \$32.17 damages claimed in not properly routing a car of grain that was purchased by plaintiffs and shipped to New York, was tried before a jury. The jury, after a brief deliberation, brought in a verdict in favor of the defendants. Notice was given that the case will be taken to the common pleas court.—West Liberty, O., Banner.



### BILL OF LADING RATES NOT BINDING.

Although it has become pretty well settled in the minds of those persons who have given the proper degree of attention to the subject that the rate inserted in a bill of lading not only adds nothing to its value when correct, but is of no force whatever when wrong, it is nevertheless proper that attention should be called to the subject when occasion offers in order that a more general understanding may be had of this fact. One of the instances not heretofore noticed is mentioned in Business Law, in which the supreme court of Georgia holds that a common carrier who has complied with the terms of the law in printing and making public its schedule rates is not prohibited from collecting such schedule rates because of a less rate being by mistake inserted in the bill of lading, "no fraud or willful deception having been practiced or attempted." While under the law, as it now stands, there can be no manner of doubt that the decision is correct, at least so far as interstate shipments are concerned, there would seem to be no reason why the condition above quoted should have been introduced by the court. The fact that there was or was not any fraud present in the contract does not in any way affect, much less invalidate, the lawful rate of carriage. Under the law as it now stands there is only one lawful rate, namely, the rate specified on the lawfully published tariff posted for public use at the place of shipment; and nothing that the carrier or the shipper may do either severally or jointly, by misapprehension or by fraud, can make lawful any other rate. Transportation charges are no longer a matter of contract. They are designated by law. That is to say, the law specifically states what particular schedule or rate fixed by the carrier shall govern. The insertion of the rate at the initial point may be useful as an item of information, but is of no value as determining the amount to be charged.—Railway Review.

### MEETING OF CINCINNATI RECEIVERS.

The Grain, Hay and Feed Receivers' Association of Cincinnati has held two meetings recently. At the first meeting the name of Garner, Strasburg & Levi was substituted for the G. Y. Roots Company, on the membership books. Until the failure of the Roots Co. the above named firm did business as a separate corporation under the Roots name. A proposition to enlarge the protective feature of the Association was discussed. The first object of the Association, to enforce cash payment for goods delivered to retailers and jobbers was so successful that the Association decided to turn its attention to abuses existing outside the city, and among shippers. The meeting was a harmonious one.

At the second meeting held October 23 the Association adopted amendments to its rules to broaden its work.

The Association found that it had succeeded so far beyond expectations in correcting abuses in the local trade, that it was unanimously decided to try and remove some of the evils of the outside business. By the adoption yesterday of the following regulations the members of the Association expect to be able to protect themselves:

"No. 16. Each firm member of this Association shall report to the Chairman of the Executive Committee within five days after the fact is known the name of every firm shipping to them who do not make good any overdraft upon receiving account sales, or account purchase, as the case may be, and after demand; also any shipping firm who shall fail to refuse to ship within the stipulated time of contract, any goods purchased by said members, unless same is satisfactorily adjusted; and if the Executive Committee after investigation considers the charges justifiable, the name of such shipping firm shall be reported and posted as per medium provided by the Secretary.

"No. 17. After the name of the shipping firm has been reported, no member of this Association shall pay any drafts of said shipping firm or make any

purchases from said shipping firm till after such disability is removed.

"No. 19. Regulations 4, 16 and 17 shall not be construed to prevent any member from carrying out contracts existing at time of such report, nor shall this penalty become operative against any non-resident shipping firm who have signified their willingness to submit differences to arbitration before the Chamber of Commerce."

A rule was also adopted providing for the enforcement of the above.

### THE NEW STAR AND CRESCENT ELEVATOR AT CHICAGO.

The most conveniently arranged small elevator completed recently is the new 100,000-bushel elevator of the Star and Crescent Milling Co. at Chicago, built by the Simpson & Robinson Co. It adjoins the mill warehouse on the south, and extends from the river to the tracks of the C., M. & St. P. R. R.

The elevator is a brick building 40x90 feet and



THE NEW STAR AND CRESCENT ELEVATOR.

70 feet high. The cribbing of the 15 hoppers bins is independent of the walls. Most of the bins extend down to the floor of the elevator on either side of the first floor. Handholes for obtaining samples of the contents of the different bins are provided, also valves for regulating the flow of wheat from the different bins to the elevator boots.

The house has two elevators for elevating wheat from the ground floor to the cupola or texas. One leg contains a 10-inch rubber belt bearing 9-inch cups and the other contains a 11-inch rubber belt bearing 10-inch cups. On the spouting floor above the bins are two of Simpson & Robinson's Improved Double Jointed Revolving Spouts which take wheat from the two 1,000-bushel hopper scales on the floor above and deliver to any one of the bins or to the boot of a small transfer elevator on the spouting floor. This transfer elevator leg contains a 14-inch rubber belt bearing 12-inch cups. Each one of the revolving spouts can spout to one-half of the bins, and by spouting to the boot of this short elevator grain can be transferred from either end of the elevator to the other, or to the large sheet iron pipe which extends from the elevator over the warehouse to the mill, as shown in the right of our illustration. Friction clutches are so arranged in the texas that either or all of the elevator legs can be operated when desired.

On the top or scale floor is a speaking tube which

places the weighman in communication with the ground floor. On the spouting floor is a telephone to the office. The elevator as well as the entire plant of the Star & Crescent Milling Co. is lighted by incandescent electric lights.

A conveyor box containing a 14-inch screw conveyor extends the full length of a long platform which runs from one end of the company's property to the other—over 300 feet. A switch runs along this platform so that wheat can be received from cars at any point along the platform. As this is the only switch the company has, and it uses it for loading cars with flour, the long screw conveyor is a great convenience, as wheat can be dumped into the conveyor box anywhere along the property and quickly removed to the elevator or direct to the mill. The company has some storage and all of its cleaning machinery in the mill.

One of the attractive features of this plant is Robinson's Single Rope Drive which noiselessly transmits power from a large sheave just outside of the engine room of the mill along the warehouse to the elevator as is shown in the illustration. By means of a line shaft and belt on the first floor power is transmitted to the screw conveyor from the sheave on the east side of the elevator, which is shown in the cut. The take-up hangs on the outside of the building as shown in the cut. An iron stairway outside on the north side of the building affords easy communication between the elevator and the mill. The elevator was designed and constructed by the Simpson & Robinson Co. of Chicago.

### WHEAT INSPECTION AT NASHVILLE.

Previous to 1890 we had no regular wheat inspection in our market, and every mill man and dealer inspected his own purchases, resulting in many disagreements as to grade or quality when the wheat was delivered, it being quite a common practice in early days for the farmer to rub out a small quantity from the shock, exhibit his sample, and sell by it. Possibly rains would occur, and thereby damage his wheat, by causing to sprout or be tough when delivered, and again, the thrasher sample might show smut balls, cheat, or cockle, and always cracked grains and chaff, giving the wheat a different appearance from the sample bought by. Due allowance was always made for a reasonable amount of foreign matter, but when delivered tough, sprouted, or smutty, then the buyer refused to receive it at purchase price, and a new price had to be agreed upon, but often the buyer would accept the crop rather than have contention.

This was in days of small mill capacity, but when larger mills succeeded the old ones, and larger amounts of wheat were required, the mill men and dealers saw that a change had to be made in manner of purchasing, and passing upon, and receiving wheat, and they realized the necessity of a regular inspection as existed in all other markets. A meeting of mill men and wheat dealers was called at the Merchants' Exchange building, and the present incumbent was recommended for the position, and was duly appointed by the Merchants' Exchange to act in capacity of public inspector for the city of Nashville, which position he has filled until the present time, doubtless at times offending both buyer and seller, but always endeavoring to do justice to both sides.

Public inspection does not apply to wagon lots, nor wheat that comes by boat in sacks, but all car lots are inspected immediately after arrival and a certificate giving the grade of each car is handed to the mill or dealer. The inspector opens the car and spikes or bores the bulk in different places, examining each spikeful for foreign matter, such as smut, cheat, cockles, wild onions, and also for weevil or must, and where no foreign matter is found that will injure its milling value, a mixed sample of the whole is placed in cups and weighed, and where a weight of 50 pounds per bushel is obtained a certificate for No. 2 wheat is furnished. No. 2 wheat must be sound and dry,



and reasonably free from foreign matter, and weigh not less than 59 pounds per bushel.

No. 3 must be sound and must weigh 57 pounds. No. 4 must be reasonably sound and weigh 55 pounds. Where wheat is unsound, tough, or smutty, it is marked N. E. G., which means No Established Grade, or, in other words, rejected for some defect that injures it as a milling wheat. Smut is a very serious trouble, and when broken and end of grain of wheat is stained, it is almost worthless as milling wheat.

Where farmers have crops containing smut balls, it is advisable to fan same at home, and use a smut board to throw the wheat as far out as possible on the riddle, so the balls can be blown over and gotten rid of. It is poor economy to send in a car of good wheat containing smut balls, as such wheat will not grade, and N. E. G. may not bring within 3 to 5 cents of No. 2 price.

The requirements for No. 1 wheat are so very rigid that we rarely ever see it in any winter wheat market, though quite a common grade in spring wheat markets in the extreme Northwest.

In the purchase of wheat since inspection came into use, the mill man or dealer rarely ever buys by sample, or even if he does he makes No. 2 the basis and bids so much for No. 2, and if not No. 2 then for whatever it may inspect on arrival. The difference in value of grades varies according to the crop. Where the crop is heavy and sound, No. 3 will often sell close up to No. 2, but when the crop is poor and light, then No. 2 will sometimes command 3 to 5 cents over No. 3. The crop of 1894 was noted as one of the best and heaviest on record, "outside of smut," averaging No. 2 in almost the entire wheat belt. Our local crop was somewhat injured by a heavy rain, and did not quite show up with every other section. The crop of 1895 is recognized as one of the poorest on record. The crop of 1875 was injured more by rains, but the grain was plump. This year's crop is a fair quality in middle Tennessee, but not an average yield. North and west of us it was injured by frost in the spring, causing a very light quality, then followed by rains after harvest, damaging it in the shock, making a crop poor, light, tough, and weather stained, and much of it really unfit for milling, averaging not much, if any, over 56 pounds per bushel, and much of it running as low as 53 per bushel. It is a rare instance where we see a car of really dry wheat this season, all is more or less soft, and mill men complain greatly about the quantity it takes to make a barrel of flour, and also reduced quantity that can be turned out per day.

If farmers would not permit themselves to be hurried and rushed by thrashers, but let their wheat dry in shock, we would have dry wheat, and less complaint from mill men. Every farmer knows from experience what it is to have his wheat thrashed tough. He attempts to dry it at home, possibly; he often becomes disgusted, loads it into a car, ships it to a mill or dealer, and gets a report that his wheat arrived, but is tough, musty, hot, or contains weevil. He comes to see about it, and must take what it will bring, whereas, had the same wheat remained in shock until thoroughly dry, it would bring close up to No. 2 price.

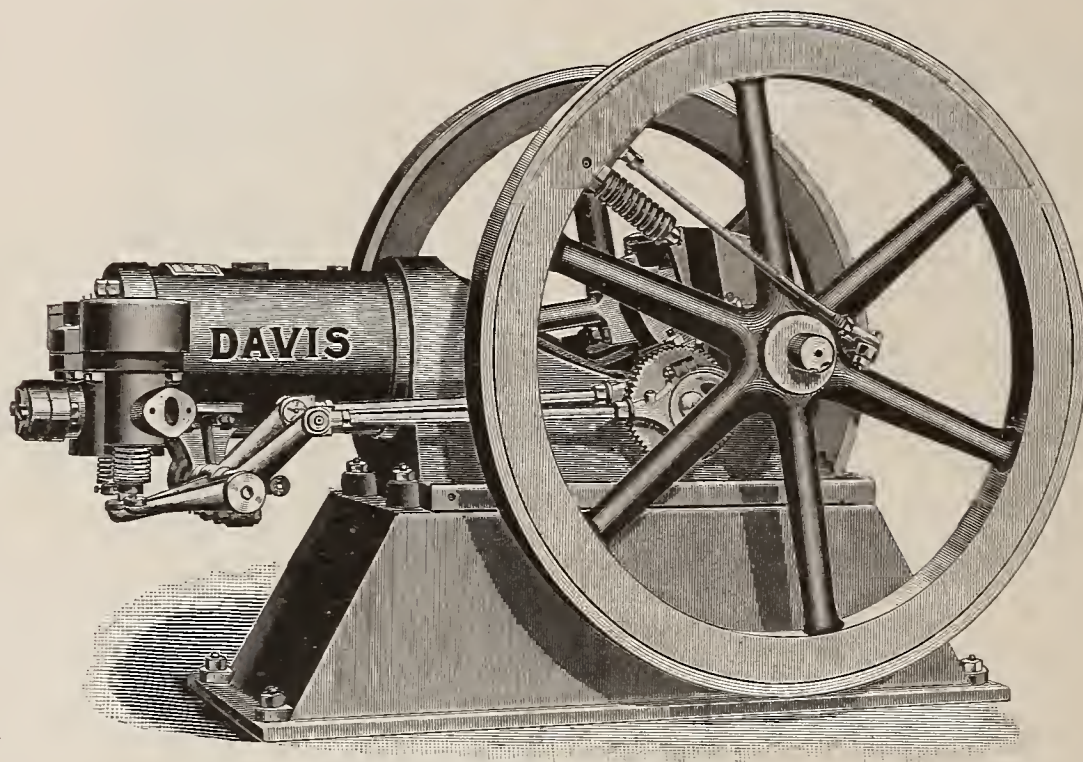
A farmer living near this place thrashed his wheat from shock very late in August, shipped it, and followed it to sell. It was inspected the 30th day of August, and graded No. 2, and weighed 59 pounds. He told the inspector that he refused to have it thrashed time and again, and when he knew it was dry he found a thrasher to thrash for him, although told by them that they would not return to thrash it. Many people have an idea that wheat can be dried in a very short time, but when it is really tough it cannot be made dry before cold weather, and will never weigh well even if thoroughly dry. Another mistaken idea with many is that an elevator can dry their tough wheat. Elevators are for dry wheat, and tough wheat must be spread on floors and turned here just as the farmers must do at home.

In thrashing wheat there is always a given quantity of tailings or refuse, and some farmers

are careless enough to put it in the car. It is better to throw it away, or better still to feed it to chickens and hogs, but don't put it in good wheat, as it may cause your car to grade N. E. G., and cause a serious loss.

The mode of inspection is to use a long hollow tube with openings in the side. When driven to the bottom of the car, it gets grain from the different depths of the load in the car, as the car is spiked or bored in different places, and any defective wheat will show in the spike. All the borings are placed in a pile, and if all right the pile is mixed and the tester is filled and struck off with a straight edge and weighed, and a certificate is furnished the buyer giving the grade and also weight per bushel. The inspector's charge for inspection is 40 cents per car for each car inspected. A few people labor under the impression that the mill men and buyers advise with and make suggestions to the inspector as to how their wheat shall grade, but such is not the case.

The inspector goes to each railroad office and copies from their books a list of every car of wheat received during the day and goes direct to the yards and finds the cars, opens and inspects same without knowing who the shipper is, and in no instance is a mill man present when wheat is inspected.



THE DAVIS GASOLINE ENGINE.

nor does he know the grade of same until a certificate of inspection is deliverable to him.

The first year of inspection the number of cars inspected was 2,875, the second year 4,800, the third year 5,400, the fourth year 6,400, the fifth year 7,000 cars, showing a steady and healthy increase each year. The average weight of cars at present time is about 40,000 to 42,000 pounds per car, or 700 bushels. This shows that our receipts the past season by rail will amount to about 5,000,000 bushels, and in addition to this river and wagon receipts are to be added, amounting to about 1,000,000 more, making a total of 6,000,000 bushels. Quite a respectable showing for our city as a wheat and flour market.—J. M. Williams, Wheat Inspector, Nashville, Tenn.

Millers are beginning to complain of the practice of grinding corn cobs for feed. Such feed can of course be sold cheaper than millfeed, and some people are foolish enough to be satisfied with the cheapest, even when the cheapest is corn cobs.

Farmers and business men of Cerro Gordo and other northern counties of Iowa recently petitioned the State Board of Railroad and Warehouse Commissioners to lower the schedule of freight rates on grain from Iowa points East, and especially to Chicago, setting forth that one-third the value of grain is absorbed in shipping it there. The board held that the matter was out of its jurisdiction and advised taking the case before the Interstate Commerce Commission.

## THE DAVIS GASOLINE ENGINE.

Gas and gasoline engines have become such a necessity in the operation of modern elevators, especially when situated at country points, that elevator men never overlook them in their consideration of the power to be used in their houses. The argument of no coal, no steam, no fireman, no smoke, combined with the simplicity and special adaptability of gasoline engines to elevator work, has been answered by elevator men continuing to put in more and more of them.

The Davis Gasoline Engine Co., which manufactures the Davis Engine, claims that in it are combined simplicity with reliability, safety with cheapness—important features in an engine. A cut of the Davis engine is shown herewith. Its construction and operation are based upon well-tried principles, proved through many years' experience. It has a throttle by which it is started, stopped and its speed regulated, the same as a steam engine. The gasoline is fed direct through a throttle. Each charge of gasoline is proportioned to suit the work being done by a governor valve operated upon by a fly wheel governor. There is an automatic crank oiler, and a shield over the crank prevents it from throwing oil, and guards against the danger of

anyone getting caught in the crank. An oil-way round the base of the engine catches all the oil, which may be filtered and used again. The engine is furnished with water tank, gasoline tank, glass sight feed oil cups, muffler for exhaust pipe, etc.

A few moments' instruction is said to be sufficient to enable anyone to run this engine, and it is claimed to be absolutely safe. The Davis Engine runs on less than 1-10 gallon of gasoline per hour per indicated horse-power, about the same amount of water being used to keep the cylinder down to working temperature. It is said to be strictly reliable, as there are no odd-constructed movements and no sensitive or variable valves or other apparatus needing regulation. All bearing or wearing surface can be adjusted to take up wear.

The Davis Gasoline Engine Co. of Waterloo, Iowa, manufactures the Davis Gasoline Engine in ten sizes, ranging from 1¼ to 20 actual horse-power.

For the first time on the present crop the St. Louis wheat market closed lower than at Chicago, November 10.

The regular grain commission trade regards with some dislike the establishment of so many small bucket shops in Kansas City. Apparently anyone with \$100 capital, and some knowledge of the speculative market, goes into the business. It is doubtful if Kansas City ever had more fake commission houses pretending to have special wire service than it has now.—World, Kansas City.



**MISROUTED GRAIN.**

Carriers are always averse to standing the brunt of the errors of their own agents and get out of it whenever they can.

A claim of J. H. Hermes & Co., grain dealers of Cincinnati, against the Central Railway of Georgia, for \$199.06, damages to a car of corn, which has been standing for two years, was settled, recently, by arbitration. Hermes & Co. shipped the car of corn to a party at Columbia, S. C., by the Louisville and Nashville, reshipping at Chattanooga via the Central of Georgia. The agent of the latter road misrouted it to Columbia, Ala. When it finally reached its proper destination, the consignee found it in such condition that he had to sell it for 25 cents a bushel. Hermes & Co. presented a claim for the difference.

After two years, arbitration was secured. Hermes & Co. chose Chas. S. Maguire, and the Central of Georgia chose W. H. Connor, of the Southern Pacific, and for a third party the two chose A. R. Lafferty. The decision they rendered was that the entire loss be paid by the Central Railroad of Georgia, thus clearing the L. & N. of blame; that Hermes's representative committed himself by taking samples from the car on its arrival at Columbia, and trying to sell it, when it should have been left in the hands of the railroad company, if a claim was to be presented. In consideration of these facts they agreed that Hermes & Co. be paid one-half their claim—\$99.53.

### THE HENDERSON-JOHNSTON CO.'S NEW ELEVATOR AT PITTSBURG.

As a grain market, Pittsburg has gained considerable in importance during the last few years. Its grain merchants have, by perseverance and close attention to the interests of their country customers, made the Iron City the grain distributing point for surrounding territory and the local trade has grown to large proportions. In order to keep pace with this growing trade it has been necessary for its grain merchants to provide additional and improved facilities for handling the trade. Last year one new grain-handling plant was erected and several old ones were improved, and this year what is claimed to be the largest plant of its kind in the United States has been erected by the Henderson-Johnston Co. The illustration given herewith shows it to be a very extensive plant with facilities for the rapid handling of large quantities of grain.

The platform for unloading grain is 240 feet long, divided into pockets of 22 feet each, at which points cars may be unloaded throughout the entire length. The grain is unloaded from the cars by power shovels driven by electricity. Conveyor belts run lengthwise of the building, under the pockets, with a carrying capacity of 12,000 bushels of grain per hour. At the end of this conveyor is the elevator leg for elevating grain to the hopper scale or to the storage bins. The storage bins, 14 in number, are built entirely of steel and 22 feet square. Each has 10,000 bushels' capacity. These bins extend over the railroad track and are provided with down-spouts for loading cars or for bagging. After the grain is elevated to the top of the building, it is then delivered to the conveyor-belt, running over the top of the line of bins. This belt is equipped with a reversible automatic tripper.

The warehouse at the extreme end of the bins contains all of the elevator machinery, consisting of an oat clipper and cleaner of 4,500 bushels' capacity and the largest oat-clipper ever built. This machine is built so as to be used for cleaning all kinds of grain. This gives the elevator a combined cleaning capacity of 8,500 bushels per hour. All of these machines are driven direct by electric motors. It is intended to make a specialty of chopped feed for shipment and for the Pittsburg market. All of the machinery for this branch of the business is also located in this warehouse and has a capacity of 1,500 bushels per hour. The plant is equipped with machinery for the automatic handling of the grain from all parts of the building, and through the hop-

per scales to the bagging department. The storage capacity for chop and mill feed is 8,000 tons, in addition to the bin storage.

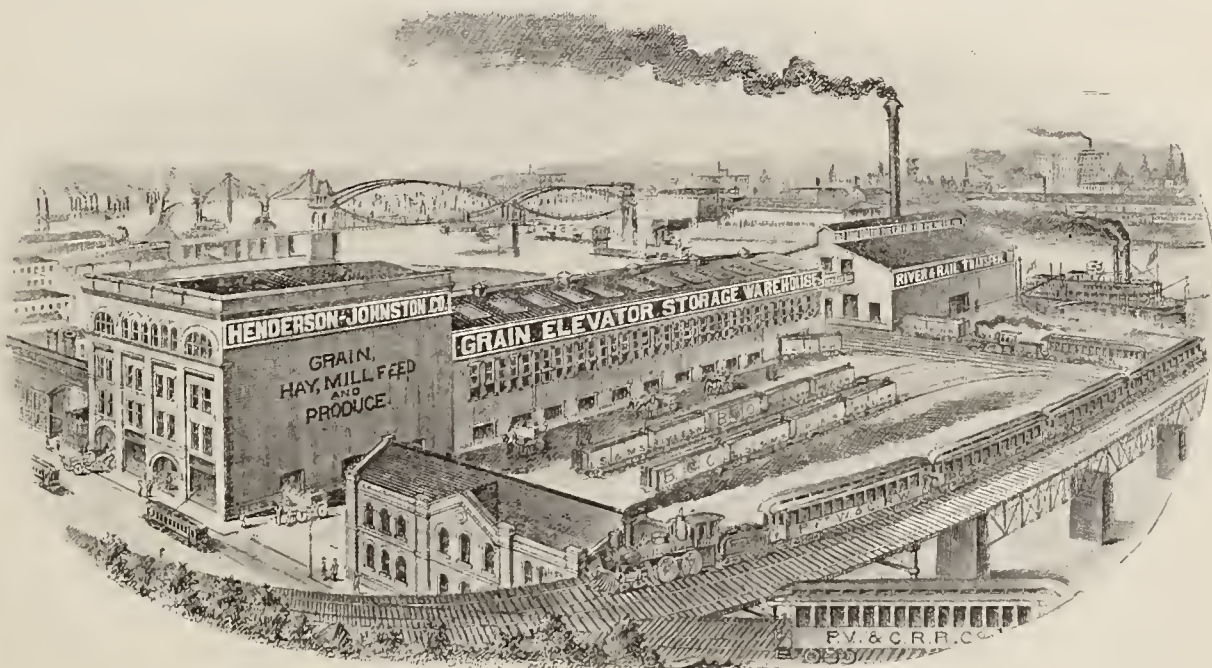
In connection with the Pittsburg & Cincinnati Packet Line, the Henderson-Johnston Co. arranged for a rail and river transfer. They have a moving platform conveyor five feet wide with a carrying capacity of 600,000 pounds per hour, extending from the dock on the river through the marine warehouse, across the railroad tracks by a bridge, then through the entire length of the elevator and storage warehouse to the produce and office building, a distance of 600 feet. This conveyor is provided at the marine end with a swinging arm, which adapts it to all stages of water. It also has a horizontal feed which will carry packages from the ends of the boats and barges to the center hatchway, thus saving the handling of freight by roustabouts. At the inner end of the conveyor in the marine building is a swinging arm 74 feet long, which will deliver freight onto the cars on siding at the marine warehouse. This arm is also raised at the outer end for the elevating of freight which is conveyed into the marine warehouse. The speed of this conveyor is varied at will. The main conveyor, commencing at the bridge at the terminal in marine warehouse, extends through the main warehouse on the second floor. Packages are passed from the swinging arm

### AN UNUSUAL EXPERIENCE WITH A GAS ENGINE.

An account of a rather unusual gas engine trouble, recently given in a German paper, is worth noting and is quite suggestive in its way, says Cassier's Magazine. It appears that in a Munich establishment, where two gas engines furnished the power, premature explosions of the working charges in the cylinders became so frequent and troublesome that the engines were dismantled and thoroughly overhauled to determine, if possible, where the seat of the difficulty lay.

The engines had been in regular operation, for about a year, and until near the end of that period had given entire satisfaction. The examination disclosed the interesting fact that the water pipes leading to and from the water jackets around the cylinders and the jacket spaces themselves were almost completely choked up with what appeared to be a species of boiler scale, which made circulation of the cooling water impossible, and led to overheating of the cylinders, exhaust valves and other working parts and the consequent irregular function. The scale, of course, was simply lime salt deposit from the heated cooling water.

As, however, the water flowing through the jackets never reached, while circulating, a temperature



THE HENDERSON-JOHNSTON CO.'S NEW ELEVATOR AT PITTSBURG.

per scales to the bagging department. These conveyors are equipped for the handling of all sizes of package freight. There is arranged, in connection with this conveyor, a movable conveyor for elevating package freight from the first floor to the second floor and also to the moving conveyor that is running on the second floor.

The first and second floors of the main warehouse are used for hay storage, capacity 500 cars. This building is designed to carry a strain of 4 tons to the square foot on each floor. It was the object in designing the plant to eliminate to the greatest possible extent all handling of freight by hand.

The front building is 4 stories high and occupying the entire front are the offices of the company. A driveway extends the entire length of the plant, running parallel and side by side with the railroad track through the storage warehouse. The power plant, which is located in the marine warehouse, is equipped with water tube boilers and compound Corliss engine. All of the generators are located at this point. The buildings are heated entirely by steam and lighted by electricity. The general offices and private offices of the company and all points of the building are connected by an independent telephone exchange. All of the floors in both buildings are connected by large freight elevators. The plant is equipped with two large track scales, hay scales, hopper scales, and besides several dormant scales. All of the car scales, hay and hopper scales are provided with automatic registering and printing beams to insure accurate weight.

at which salts in solution would be precipitated, it was obvious that the precipitation had occurred during the short periods after the engines stopped working. At this time the circulation of the water through the jackets ceased, and, consequently, the water left in them was raised by the heat of the surrounding parts of the engines to a temperature at which precipitation of the salts held in solution became possible. A simple cure for a difficulty of this kind would obviously have been to keep the water circulating through the jackets for a short time after the engines stopped running, so as to prevent any considerable rise in the temperature of the water. Users of gas engines may find this worth bearing in mind.

In Kansas City they have what they call a "dynamite bucket shop." It is probably a thing of quick action, exploding every time the market goes against the managers.

The Santa Fe Railroad made a temporary tariff of 8 cents on grain from the Missouri river to Chicago, October 21, the old rates being restored November 3. The railroad claimed that it had to do it to meet the cut made by other roads.

Grain men of Kansas City say that the Union Pacific Railroad is discriminating in favor of St. Louis, hauling grain from Nebraska points to St. Louis at from 3 to 6 cents per 100 pounds less than from the same points to Kansas City. The grain men have petitioned the railroad to adjust the tariff.



## MEETING OF THE ILLINOIS GRAIN DEALERS' ASSOCIATION.

A meeting of the Illinois Grain Dealers' Association was held at Decatur, Ill., Oct. 17. About 70 members were present and the attitude of each one, whether in the discussion of one of the many subjects which were presented at the meeting, or in listening to the opinions of others, showed an earnestness of purpose which presages correction of the many irregularities in the grain trade.

President John Crocker called the meeting to order at 11 a. m. The minutes of the previous meeting were read by Secretary B. S. Tyler and were approved as read. The following applications for membership in the Association were read by the Secretary.

Edward G. Heeman, with Hill Bros., Chicago; McCourtie & Hill, Chicago; Calumet Grain & Elevator Co., Chicago; Nash, Wright & Co., Chicago; R. F. Cummings, Clifton; F. S. Cowgill, with Bartlett, Frazier & Co., Chicago; Maguire & Co., Cincinnati, Ohio; Hayes Bros., Galesville; O. L. Brining, Heyworth; Carlisle & Blue, Downs; J. M. Quinn & Co., Peoria; W. T. Wykes, Carbondale, with Redmond Cleary Commercial Co., St. Louis, Mo.; W. W. Gilbert, Danforth; Thos. S. Clark & Son, Baltimore, Md.; Milmine, Bodman & Co., Chicago; E. Naylor & Co., Fisher; Pearce & Co., Fisher; J. M. Camp, Bement; T. D. Bartlett, Emery; Veech Bros., Oakley; Wyeth & Hardin, Charleston; H. S. Nichols & Son, Sadorus; John Foohey, Ivesdale; Wm. Wykes, with C. S. Bentley, Chicago; F. J. Zimmerman, Harvel; W. F. Boyer, Meredosia; A. W. Skinner, Hudson; V. C. Elmore, Ashland.

On motion all the applicants for membership were elected members of the Association.

Mr. Maguire moved that the Secretary be instructed to prepare a list of all the members of the Association and send a copy to each of the members. The motion was carried.

In the absence of Theodore Baxter, chairman of the Committee on Shortages, B. S. Tyler of Decatur made a report and reviewed the work of the committee in Chicago on August 19. The report of the committee was accepted.

In reference to this report John Hill Jr. said: "The weighing committee of the Chicago Board of Trade drew up an agreement which was presented to each member of the Chicago Grain Shippers' & Receivers' Association to sign. This agreement was to the effect that they would use only Board of Trade weights. Only 4 out of a membership of 85 refused to sign." He further said that the Association should insist in every possible way that grain should be handled in Chicago as they desired. It was not unjust that shippers should demand that grain should be weighed in Chicago by disinterested weighmen.

The Secretary moved that the Chair appoint a committee of three to report a resolution regarding shortages at the afternoon meeting. The Chair appointed B. S. Tyler, Arthur Sawers and Ross Hockaday.

On motion the meeting adjourned to convene at 2:30 p. m.

### AFTERNOON SESSION.

The meeting was called to order at 2:30 p. m. by the President. The Secretary read the following resolutions of the Committee on Shortages.

Whereas, The Board of Trade of the City of Chicago recently passed a rule requiring members of that organization to furnish public or disinterested certificates of weights on all grain consigned to them or bought by them at country points when Chicago weights are the basis of settlement; and

Whereas, Eighty-one out of eighty-five members of the Chicago Grain Shippers' Association of Chicago signed an agreement to insist on Board of Trade weights on all grain sold by them to go to public or private elevators or local industries; and

Whereas, Certain members of the above Association who signed this agreement have been knowingly violating it; therefore be it

Resolved, That the members of the Illinois Grain Dealers' Association will not consign or sell to any receiver or buyer of grain who knowingly violates the rule of the Board of Trade or the agreement of the receivers and shippers in regard to weighing.

B. S. Tyler, Decatur,  
Ross Hockaday, Oreana,  
Arthur Sawers, Chicago.

The resolutions were adopted.

S. H. Greeley said that it would be a good plan to notify the Chicago Grain Receivers and Shippers'

Association of the passage of this resolution and to suggest to them to have their traveling men to post all the grain dealers in Illinois in their territory of this action. He moved that the Secretary be instructed to send to the Secretary of the Chicago Receivers and Shippers' Association a copy of the resolution and to request him to ask all the members of that Association to notify their patrons not to ship grain to any firm which would not observe these rules. The motion was carried.

In reference to instructing grain dealers throughout Illinois of this action of the Association, Mr. Greeley said that he would take it upon himself to see and instruct grain dealers along the line of the Rock Island railroad. In response for volunteers on other roads, E. G. Heeman agreed to cover the territory embraced by the Illinois Central; Arthur Sawers the Chicago & Eastern Illinois and Toledo, Peoria & Western, east of Peoria; E. A. Curtis any and all roads over which he traveled.

John Hill Jr. moved that the Secretary be instructed to send a copy of the resolutions to the Secretary of the Board of Trade of Chicago. Carried.

S. H. Greeley, in a general discussion, thought that the Chicago dealers who would not observe the rules should be advertised.

The Secretary read the following form of a letter to be used by country shippers in demanding official weights for their grain when consigned to Chicago:

\_\_\_\_\_, Ill., October 17, 1895.

Messrs. \_\_\_\_\_

Chicago, Ill.

Dear Sirs:—In the future all grain sold you for Chicago delivery, or sold by you for our account, is with the full understanding by you, that the settlement must be made on John Walker's official Board of Trade weights, or on our station weights.

No other weights will be taken on any settlement where Chicago terms are mentioned. Do you desire our business on these conditions?

Yours very truly,

Chas. S. Maguire moved that the Secretary be instructed to mail a copy of the letter and a copy of the resolutions to every grain dealer in the state of Illinois, whether a member of the Association or no; and also a copy of each to the Secretary of the Grain Dealers' Association of Northwestern Iowa. The motion was carried.

W. R. Armington moved that hereafter invitations to the meeting should be sent out under cover of a two-cent stamp. Carried. Mr. Maguire moved that the Executive Committee be authorized to secure the services of a man who should canvass the state and solicit new members for the Association. In the general discussion which followed, R. E. Pratt thought the plan of sending a man out through the state too expensive. S. H. Greeley deemed the best plan would be to send out letters and circulars to the grain dealers, to see them personally if possible, and to instruct their traveling men to bring the matter to the attention of the dealers. E. A. Curtis objected to the motion on the ground that it would take too long a time for one man to go over the entire state. He thought Mr. Greeley's plan a very practical one.

Mr. Maguire moved to amend the motion by having the Executive Committee use special exertions to increase the membership of the Association throughout the state. The amendment was carried.

R. E. Pratt again brought up the subject of re-sealing cars after inspection. He said: "It is the custom of the inspectors to inspect the car on its arrival at Chicago, after which the railroad car seal is put on the car. The car might be opened the next day by the buyer's private sampler and it might have been opened on the very day of its arrival at the elevator. It was his opinion that the inspector's seal should be placed on the car after each opening.

Mr. Maguire said that at Cincinnati each railroad contributed to the inspector's fee. Each road paid every month to the inspector to immediately reseal the car after the grain was inspected. If this seal was on the car it might be known that it was opened by the inspector and resealed before his leaving it.

Mr. Pratt said that the objection to that plan in Chicago was that the buyer was allowed 24 hours, after purchasing, to send his own sampler to re-open the car.

J. G. Smyth of Chicago said that in his estimation in the majority of cases the grain went out of the end of the car and not through the door.

E. L. Greenleaf of Jacksonville read a section of the law and said: "The grain we ship to Chicago goes over different roads. Ten lines of that law refers to discrimination. It should be the duty of the Association to see if the law is good."

Mr. Pratt said that many of the grain dealers did not want the law enforced.

Mr. Greenleaf related that in one case where he had had a considerable shortage, the railroad company, instead of turning the grain over to the consignee had simply transferred it to a buyer who reported the car had sold for so much money.

Mr. Pratt said that the difficulty in collecting shortages was due to the transferring of grain from the cars of one road to those of another.

Mr. Greenleaf replied that railroads should have scales at the junction and connecting points.

Mr. Pratt: Railroad companies cannot be held responsible for grain going to some other road.

Mr. Baxter: "The initial road should be held responsible for shortages. I have had claims paid from New England. In these cases each road had paid its share of shortage to the initial road. Shippers in the country do not seem to have a right idea of the liabilities of railroads. If a grain dealer wishes to make a claim for shortage he should make proof of it. If the station agent refuses to weigh the grain as he does, then the shipper can weigh it and send the sworn weights into court. He can then collect his claim for shortages."

John Hill Jr. of Chicago gave it as his opinion that the Wabash railroad could not be held liable for grain after it had turned it over to the Belt Line. After leaving the Belt Line it might be shipped to the Fort Wayne. There seemed then to him no chance to make a claim for shortage. He said the railroads were too big and that if the Association wished to fight the railroads successfully it must start out on some line and follow it to the end.

W. H. Suffern of Decatur thought that when grain came to him over the Belt Line it should be held responsible in case of shortage. He believed that railroads should either put in track scales or observe the shippers' sworn weights. The railroads should be compelled to give a clean bill of lading and should be held responsible for shortages.

Mr. Baxter offered the following resolution:

Resolved, That this Association condemns the action of the Chicago Sugar Refinery and others who have thus far refused to allow grain bought by them to be weighed by Board of Trade official weighmasters, and regards such action on their part as *prima facie* evidence of a disregard of the best interests of the grain dealers of Illinois.

On vote the resolution was unanimously adopted.

Mr. Maguire read the following resolution:

Resolved, That the Board of Railroad and Warehouse Commissioners be requested to require the railway companies to reseal all grain cars with special seals, at destination immediately upon being inspected by the official inspector when destination is within the state of Illinois.

Mr. Pratt: The grain dealers of Chicago should take this matter up.

Mr. Smyth was of the opinion that the resolution was impracticable; that after the inspector had sampled and resealed the cars it could not be expected that the railroads could furnish an additional sealer for every buyer who would send his own sampler to inspect the grain.

John Hill Jr. said that on the Chicago Board of Trade there were three official samplers. The Board of Trade could have them seal the cars after they had been reopened. Mr. Suffern thought that one sampler of a car ought to be enough. It was not right to have the car opened a number of times. Mr. Baxter favored the resolution. The resolution was adopted unanimously.

In regard to the action taken by the Association with reference to E. L. Everingham & Co. of Chicago Mr. Lloyd, representing E. R. Ulrich & Son of Springfield, reported that E. L. Everingham & Co. had declared that they would not do anything in conflict with the business of legitimate grain dealers and that the firm wished to work in harmony with the Association. He moved that E. L. Everingham &



Co. be exonerated and reinstated in the confidence of the Association and that it be notified of that fact. A communication from McFadden & Co. to the Secretary also stated that E. L. Everingham & Co. had ceased buying in competition both with E. R. Ulrich & Son and McFadden & Co.

Mr. Greenleaf of Jacksonville was in favor of the motion, provided the recent course of E. L. Everingham & Co. was sincere. He reported that a few days previously E. L. Everingham & Co. had purchased 20,000 bushels of grain at his station, and moved that the Chair appoint a committee to confer with Mr. Everingham, and that the committee be authorized to exonerate Mr. Everingham should it find that he intended that his future course should be consistent with the reports as made by E. R. Ulrich & Son and McFadden & Co. The motion was carried. The Chair appointed on this committee B. S. Tyler and A. J. Cummings.

On motion of Mr. Lloyd, representing E. R. Ulrich & Son, C. B. Congdon & Co. of Chicago were exonerated from charges formerly made by the Association; E. L. Greenleaf approved and endorsed the course of C. B. Congdon & Co., as the firm had not solicited business from farmers and had requested Mr. Greenleaf to handle grain which had been offered to them.

The meaning of the term "regular dealer" was defined and the constitution read upon that point.

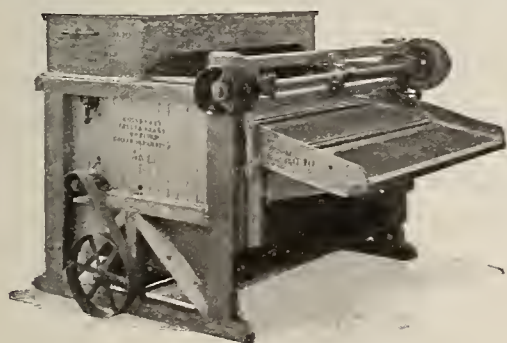
Mr. Greenleaf moved that the Secretary mail to each member of the Association membership application blanks and that each one should take it upon himself to increase the membership of the Association. The motion was carried. E. S. Greenleaf moved to amend the last clause of Article XII, Section V, of the constitution and by-laws of the Association to read as follows:

Any commission firm which is a member of this organization which shall solicit and receive for sale on consignment, grain from any farmer or irregular dealer, shall pay to the regular dealer or dealers in whose territory such grain is loaded, one cent per bushel. The amendment was carried.

The meeting then adjourned subject to the call of the President.

### CONSTANT'S COMBINED GRAIN SEPARATOR.

The Constant Little Giant Corn Cleaner, illustrated herewith, is designed to remove the cob and clean shelled corn. It is usually placed in the upper part of the building. Shelled corn and cobs are fed to it, and perforated steel screens, 54 inches



CONSTANT'S COMBINED GRAIN SEPARATOR.

long, separate the cobs which are spouted to the boiler room or warehouse. The dust, chaff and fine pieces of cobs are drawn out into a suction fan-leg that is the same width as the screen, and has a regulating valve to control the air. The corn falls down through the air, and the fine cob, inferior grains and dust are sucked up into a receiving chamber, where the dust is separated and carried into the fan and discharged outside of the building, or to a dust room. The fine cob, inferior grains, and grains of corn that have been mashed are drawn from the machine and can be used for feed. This feed will almost pay the expense of shelling the corn.

These machines are made very strong, and all journals run very tight in babbitt boxes. They take up little space, so are especially suitable for small houses. They will clean oats on the corn screen, and rye, barley and wheat on other screens, so small elevators can save the expense of a wheat cleaner. Any additional information can be secured by writing to the B. S. Constant Co., Bloomington, Ill.

### ANSWERS TO QUERIES AND NOTES ON INSECTS INJURIOUS TO STORED GRAIN.

I am in receipt of a package of oats from an Illinois firm who write as follows: "We have an onthouse that is infested with weevils. Where they came from we do not know; we have never had anything of the kind about the premises since we have been in the grain business. Can you tell us what to do to exterminate them? If so you will confer a great favor on us by sending the information."

The little grain beetle, *Sylvanus surinamensis*, is responsible for the injury to your oats. This insect is referred to under South Dakota, and I would advise you by all means to follow the advice given in the article cited.

South Dakota.—A milling firm of South Dakota sends the "American Miller" a package of a mill product infested with insects, which has been referred to me with the following note and query: "We can dispose of flour worms, but the beetles seem to thrive on the bisulphide of carbon. Kindly inform us what the insects are, and how to get rid of them." This material contained no less than four species of insects. (1) The cadelle, *Tenebrioidea mauritanica*, a troublesome pest, a very active large black beetle, an account of which is given in the September number of that journal. (2) The flour weevil, *Tribolium confusum*, and its young, a small brownish worm. This pest is a growing evil in mills and should be handled with considerable care. To this end I can offer no better suggestion than refer you to the letter of a Pennsylvania miller, quoted in my article in the "American Miller" for September, in which a detailed account of his method of procedure is given. (3) The grain beetle, *Sylvanus surinamensis*, and its young were also present. This creature was described in the April number of this journal. And (4) the larvae of the black carpet beetle, *Attagenus piceus*, a small brownish worm with a pencil of hairs at the end of its body, a short account of which was given in the July issue of that journal. This latter creature is a new pest, and has been sent me from various parts of the country during the present season. So much for the insects; and there is but one remedy for them all, and that is scrupulous cleanliness and eternal vigilance. Bisulphide of carbon is sure death to both the beetles and their young when properly applied; and if you find the beetles surviving your treatment with that liquid you can rest assured that something is wrong. You have on your premises four very unwelcome pests and I would advise a thorough renovation of the mill from top to bottom without further delay. A careful perusal of the letter from a California miller quoted in my last article in that journal will aid you in this warfare.

Illinois.—An Illinois firm sends me a sample of insect infected wheat with the following letter: "We are troubled a great deal here in Southern Illinois by a white fly we call 'the stack weevil.' We find it mostly in wheat that has been stacked. It works on the wheat like you say the moth works, in the AMERICAN ELEVATOR AND GRAIN TRADE for September, hollowing out the grain and leaving only the outer hull. Please inform me of the proper name of them and if there is any preventive to keep them out of the wheat."

This insect is popularly known as the Angoumois grain moth, *Gelechia cerealella*, and is the same creature described by me in the article to which reference has already been made. The most satisfactory remedy for treating this pest in stored grain is given in detail in the same article.

From July to December, 1894, the number of cars of flaxseed received at Superior, Wis., was 666. This year the flax receipts were as follows: In June, 1; July, 2; August, 22; September, 1,058; up to October 20 there had been received 1,725 cars, each car holding about 500 bushels, and indications were that receipts to the end of the month would pass the 2,000 mark. This makes a total of 3,809 cars received since July.

### THE SCIENTIFIC BEAN PICKER.

Bean growing has become so important an industry and of such magnitude that many country elevator men now handle beans as well as other farm produce. The progressive bean dealer, as in the case of grain, provides the machines necessary to clean the beans and strives to put them in as perfect condition as possible before placing them on the market. He works to make a good profit on them and generally succeeds.

No bean dealer is prepared to handle beans unless his elevator is equipped with a bean picker. The picker illustrated herewith is known as the Scientific Bean Picker. Its makers claim it has many good points and advantages and that its perforated cylinder removes the dust and trash, so that the



THE SCIENTIFIC BEAN PICKER.

operator has only the colored beans to remove. It has a positive force feed with no obstruction between the hopper and cylinder but a swing door, the opening and closing of which serves as a regulator of the feed and insures a constant stream of beans which can not be choked by any amount of trash. The main frame can be adjusted by lowering or raising the rear end of side irons. The cylinder and belt can be set at any inclination to screen the beans more or less, as is desired. The machine is well built and has adjustable arm rests for the convenience of the operator.

These machines have been found to be far superior to either table or wide apron picking, as the beans are spread automatically by this machine and an operator can pick over a much larger quantity in a given time.

When the beans have been placed in the hopper and the feed opened by the lever, the operator propels the machine with one or both feet so as to move the canvas belt toward him and bring beans from the cylinder. The operator picks out the poor beans and casts to either side and permits the good beans to remain on the belt and be delivered in the receptacle provided. Any additional information can be obtained by writing to Miller Bros., Rochester, Mich.

The word "new" was dropped in the inspection of wheat at Chicago November 1.

We have made inquiry and investigation regarding the charge of short weights against Port Huron elevators made by Inlay City grain dealers. Walter Walker & Co., the principal grain dealers of that place, who ship all or nearly all their purchases to Port Huron elevators, write that they have never had the slightest reason for complaint, and that their dealings in Port Huron have always been entirely satisfactory. We find also that the shippers who made the charge are now making the same complaint against Detroit elevators, to which they have been shipping recently. The trouble is clearly with the shippers, and not with Port Huron elevators, all of which show clean records, and have the indorsement of their customers and consignors generally. Port Huron elevators and grain dealers are all right.—Times, Port Huron, Mich.



### WHEN THE CROPS BEGIN TO MOVE.

It seems the way thet peple act thet trouble's in the air,  
Fer all the big men's faces look as if they had a scare,  
But father sez it is no use fer fokes to be so glum,  
Fer when the crops begin to move

'Twill  
Make Things Hum!

Hard times is all they talk about, and how it "used to be".

Before Chicago had the fair in eighteen ninety-three,  
But father sez sich talk as thet is hollow as a drum,  
Fer when the crops begin to move

'Twill  
Make Things Hum!

They talk about the silver craze and skersity of coin,  
And wonder if there isn't some new "party" thay kin join.

But father sez it seems to him the peple's goin' dumb,  
Fer when the crops begin to move

'Twill  
Make Things Hum!

And father sez the fellers that has n-othin' else to do  
But set around and talk and talk on things thet don't come true

Had better git a "move" on them and look fer "king-dom come."  
Fer when the crops begin to move

'Twill  
Make Things Hum!



[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

### WILL BUILD.

*Editor American Elevator and Grain Trade:*—We inclose \$1 for one year's subscription for the AMERICAN ELEVATOR AND GRAIN TRADE. We intend to build a malt house and elevator between now and next August, and we find a good many advertisements in your paper that are interesting to us.

Yours truly, A. F. BULLEN & CO.  
Chicago, Ill.

### SHIPPING AT TACOMA.

*Editor American Elevator and Grain Trade:*—According to the report of the harbor master of the port of Tacoma, Wash., for the month of October, the total exportation of breadstuffs was as follows: Wheat, 274,795 bushels, foreign, valued at \$112,665.95. Flour, 43,922 barrels, valued at \$106,873.30, to China and London. The inward registered tonnage was 50,248 tons; outward registered tonnage 45,533 tons; inward cargoes, 16,570 tons; outward cargoes, 79,427 tons. Miscellaneous merchandise to China and Japan was valued at \$37,926.97, to British Columbia ports \$25,624.12. Deep sea arrivals, 32; departures, 28.

SAMUEL COLLYER,  
Secretary Chamber of Commerce.  
Tacoma, Wash.

### DRYING FLAX SEED.

*Editor American Elevator and Grain Trade:*—In some parts of the country flax and wheat were allowed to get wet by rains before they were thrashed, and wherever this has happened the usual result is seen in the grain arriving at market just musty and damp enough to be below grade. To be sure such damage has not been extensive, and is entirely absent in many sections of the country, but nevertheless it appears to us that the country shipper who has to contend with any damp flaxseed and grain would find it profitable to dry the grain.

But drying flax by heat is not usually done, and probably few shippers would attempt to do it. We have no definite knowledge of the flaxseed business,

but are very confident that the Cutler Steam Dryer could successfully treat damp flaxseed; we know it does excellent work on damp wheat. If any responsible person troubled with damp flaxseed would like to test one of our dryers we will send it on trial.

Yours respectfully,  
THE CUTLER CO.  
No. Wilbraham, Mass.

### SHORTAGES DUE TO ERROR IN WEIGHING.

*Editor American Elevator and Grain Trade:*—The howling about shortages still goes on, and state inspectors and all sorts of schemes are proposed to remedy the evil; but no one seems to think that the matter of reading scale beams and recording weights cuts any figure. If this matter is considered a factor in the problem why do we not hear something about it from those who are interested in correct weights?

Terminal elevators are no doubt much at fault and responsible for some shortages, but if every car in every terminal elevator in the country were weighed by a dozen different weighmen and all of the state weighmen, the evil would still exist.

Yours truly, J. A. DEMUTH.  
Oberlin, Ohio.

### PRECAUTION AGAINST SHORTAGES.

*Editor American Elevator and Grain Trade:*—On page 140 of the October issue of the AMERICAN ELEVATOR AND GRAIN TRADE you advise shippers of grain as to preventing shortages by marking the kind and weight of grain and initial number of car upon cards and nailing them to the side doors of the car. In this connection I wish to call attention to the accompanying circular, which was issued by the Minnesota Railroad and Warehouse Commission and largely distributed, the effect of which was at once noted as beneficial and highly satisfactory.

To shippers of grain: Section 6 of chapter 29 of General Laws of Minnesota of 1893, reads as follows:

"Section 6. It shall be the duty of any shipper of grain to terminal points within the state, to fasten upon the inside of the door of every car so shipped by him, a card upon which shall be given the number and initials of such car, the date of shipment, and the actual weight of the grain in such car as ascertained by such shipper.

"In case of failure upon the part of any shipper to comply with the provisions of this section, the weight of the grain in such car, as ascertained and determined by the state weighmaster, at the terminal point, shall be taken as prima facie evidence of the amount of grain in such car contained."

The attention of all shippers of grain is called to the above section of the law, now in force, and its careful consideration will no doubt convince you of its beneficial intention; for in case of any discrepancy occurring between weight claimed by the shipper on this card and the weight ascertained by the state weighmaster, the attention of that official will at once be called to the discrepancy or difference, and its cause at once located by him, before the identity of the grain is lost, and the true weight ascertained beyond any doubt, and by this means much trouble and unnecessary delay avoided.

The law does not contemplate that the shipper's name nor the place of shipment should be put on this card, and it is our express desire that nothing but the weight of the grain be put thereon. In placing the card upon the door, care should be taken to place it near the edge of the same that it may not be hidden from sight when the car is opened by the grain inspector.

It will easily be seen that if a discrepancy exists between a shipper's weights and the state or official weighmaster's weights, the attention of the latter is at once directed to it by the presence of this card, and the cause of this discrepancy can be at once ascertained, before the grain has left the scale hopper and its identity lost. And the weighmaster will also take measures to assure himself that his weight is absolutely correct before letting the grain get beyond his control. I may say also that where this has been done, there has been no trouble whatever in locating the cause of the discrepancy where one has existed.

Your advice may have been inspired from the fact of the existence of this law, and, if not, is a singular co-incidence. But I wish to call attention to it, just the same, and that it is one of the safeguards adopted by the state of Minnesota at the instance of its grain commission, with the view of

reducing all possible chance of error to the minimum. It has proven highly satisfactory.

ST. PAUL.

### CONSIGNOR HAD TO PAY THE FREIGHT.

*Editor American Elevator and Grain Trade:*—In July, 1894, I gave the particulars of a snit brought against me by the Missouri Pacific Railroad Company to recover freight on a car of wheat shipped to St. Louis, the consignees having failed one month after the wheat had been delivered, and before the railroad company had collected the freight charges.

The railroad company lost its snit in the county court, and appealed to the district court. It came up in the district court this fall and the decision of the lower court was reversed, the suit being decided against me. The court held that the railroad had a legal claim against me, even though it turned over the grain to the consignee without demanding freight charges.

The facts of the case may interest readers of the AMERICAN ELEVATOR AND GRAIN TRADE, and if they have had any experience in the same line it may be of benefit to others if they make them public.

I billed a car of wheat to shippers with the order, "Notify Leftwich, Hodgkins & Co., St. Louis, Mo." I did not sign over bill of lading. The draft on the wheat was paid and the railroad turned it over to the St. Louis firm. About a month later the company failed, and the railroad notified me that the freight on my shipment had not been paid, and that I was being held for it, as the freight bill had been presented on the day before the failure and payment refused. I had pinned the bill of lading to the draft and turned the same over to my banker. The bill of lading says on its face that the goods will be turned over to consignee "on payment of freight charges."

I supposed until this case came up that that clause was binding to the railroad, but it appears to be otherwise. It was held to be for the company's own benefit, and that it did not release me, even though the railroad violated it by not collecting before delivering the goods.

I proved that had the railroad company presented its freight bill inside of three weeks it would have been paid. In the first place, it violated the terms of the bill of lading in not demanding the freight on delivery of goods; and in the second place it was very negligent in presenting its freight bill.

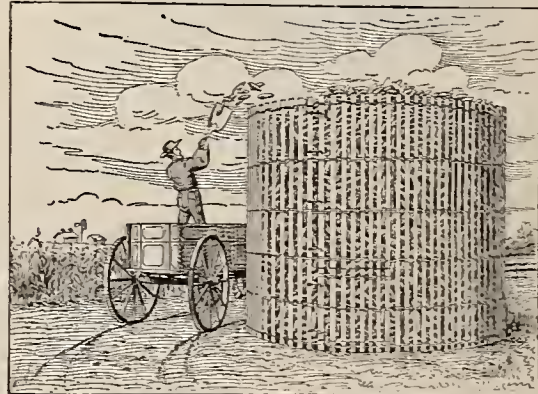
It seems that it had been a custom at St. Louis for the railroad to turn freight over to commission houses and wait a while—until the elevators had weighed the grain—and then present a correct expense bill. I knew nothing of that custom, however.

V. E. CHAMBERLIN.

Powell, Neb.

### ADAM'S PORTABLE CORN CRIB.

Corn was never more plentiful nor cheaper than it is this year. A great deal of it will be stored, and shrewd elevator men in the corn belt of the



ADAM'S PORTABLE CORN CRIB.

West are supplying themselves with cribs. There is a demand for a practical, cheap and convenient portable corn crib, and W. J. Adam of Joliet, Ill., who manufactures Adam's Portable Corn Crib, makes this claim for it.

Adam's crib is made of heavy staves woven between six sets of galvanized steel wire about one and one-third inches apart, thus allowing ample ventilation. At the bottom of the crib is a gate to empty the corn, and iron stay rods prevent the



crib from spreading while the door is open, and also allow an opening to be made the entire length of the crib large enough to set a sheller at.

The crib can be erected by anyone in 10 or 15 minutes; it is simple and compact and very serviceable. It is 8 feet high, from 12 to 24 feet in diameter, ranging in capacity from 500 to 2,000 bushels.

## Queries and Replies.

[Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.]

### No. 12. Plan for Building Cribs.

Will someone please tell me what is the best and cheapest plan for building cribs to store ear corn? I would want at least 100,000 bushels' capacity. Also please give the approximate cost per bushel. —C. A. DOLMAN, Kokomo, Ind.

### No. 13. Meaning of an Abbreviation.

Can some reader of the AMERICAN ELEVATOR AND GRAIN TRADE tell me what a "C. N. D. telegram" is? This kind of a telegram has something to do with market reports, but just what I do not know and cannot find out, though I have made inquiries of the Western Union Telegraph Co. and other places which ought to know if such a thing exists. I would be much obliged for a solution of the puzzle.—READER.

## WILL STOP BUYING ON TRACK AND SENDING TELEGRAMS.

The Grain Receivers' Association of Minneapolis, Minn., has recently sent out a circular to the grain shippers of the Northwest in which they make the following announcement:

"This Association, as its name implies, is composed of members whose business is the receiving and handling of grain at this market direct from country points, the majority of whom have interests identical with independent grain receivers and shippers at country stations. The elevator interests have recently become allied to the organization by adding their names to its membership to the end that more harmonious action may exist.

"The chief object of the Association is to prevent the cutting of commissions, either by rebate or bonus or any other method injurious to the welfare of the grain interests centered at this market, and equally so to the grain merchant from whom shipments are received—in other words to prevent the abuse of the rules laid down by the Chamber of Commerce. A majority of its members believe, and it has been agreed, that buying wheat on track at stations is injurious to all concerned, and have pledged themselves to discontinue such practice, in which the elevator interests have joined, by refusing hereafter to permit their men to buy outside of the elevators, or to interfere with track shipments.

"This Association, in addition, believes that abuses have crept into the grain business, creating serious loss and hindrance to its welfare, and the economical handling of grain without any corresponding benefit to either shipper or receiver.

"Special reference is had to the continuous use and abuse of the telegraph service.

"Country grain merchants and shippers are flooded with telegrams during every session of the Chamber of Commerce at useless expense. Such service frequently amounting to \$500 per day, a large portion of which is duplicating, unnecessary and of no possible benefit.

"Agreement has been entered into between the members of this Association, to become effective Nov. 1, 1894, not to furnish their customers with or pay for C. N. D. telegraphic markets, or send or cause to be sent any messages to shippers quoting markets except upon their request and at their expense. Should shippers desire such service it is conceded by all concerned that they should surely feel obligated to pay for same.

"The members of this Association have bound themselves to live up to agreements outlined above,

and ask their customers to join them in the effort to eradicate some of the existing prevailing methods, resulting in the handling of grain at actual cost, as this will make failures among receivers and heavy losses among shippers.

"The following list comprises the members of this Association (also members of the Minneapolis Chamber of Commerce)."

A. G. Chambers & Co.	S. H. Hall & Co.
Moore & Maxfield.	Thos. Hanson.
H. Poehler Co.	D. R. Wagner & Co.
The VanDusen, Harrington Co.	Northern Grain Co.
Security Grain Co.	A. J. Woodworth & Co.
Austin, Fraser & Co.	St. Anthony & Dakota Elev. Co.
W. A. Freemire & Co.	Inter-State Grain Co.
J. K. Elliott & Co.	Cargill Elev. Co.
Nicholls & Taylor.	National Elev. Co.
Commons, Bassett & Co.	Brooks Elevator Co.
C. E. Thayer.	Minnesota & Dakota Elev. Co.
T. M. McCord & Co.	Atlantic Elev. Co.
Martin & Wyman.	Empire Elev. Co.
McCarthy Bros. & Co.	Osborne-McMillan Elev. Co.
Sawyer Grain Co.	G. W. Van Dusen & Co.
Woodward & Co.	The Pacific Elev. Co.
Kirkbride-Palmer Co.	State Elevator Co.
W. B. Mohler.	The Central Elev. Co.
A. W. Fallgatter & Co.	Andrews & Gage.
Davis, Hubbard & Co.	A. J. Hoskins & Co.
Brooks-Griffiths Co.	Heising Bros.
The P. B. Mann Co.	Northwestern Elev. Co.
Geo. A. Moomaw Co.	Victoria Elev. Co.
Greenleaf & Tenney.	Monarch Elev. Co.
W. O. Dodge & Co.	Columbia Elev. Co.
Wheeler, Carter & Co.	W. H. Wheeler.
J. Q. Adams & Co.	H. Miller (Strong & Miller).
Crosby & Co.	S. Strong (Strong & Miller).
E. F. Osborn Commission Co.	Great Western Elev. Co.
J. G. Swart & Co.	James Marshall.
Sustad Bros.	Whallon & Co.
Ryan, McKeown & Co.	Minneapolis & Northern Elev. Co.
Wm. A. Townsend & Co.	Thorpe Elev. Co.
L. T. Sowle & Sons.	Minnesota & Western Grain Co.
S. S. Linton & Co.	Geo. C. Bagley Elev. Co.
F. H. Peavey & Co.	
Cargill Commission Co.	
Turle & Co.	

## DOTS AND DASHES.

The South and West Grain Congress met at Atlanta, Ga., on October 23, 24 and 25.

Only one car of corn was shipped to Superior, Wis., last year, and none so far this year.

The National Road Conference and Road Parliament met at Atlanta, Ga., October 17, and elected officers.

It is said that farmers and speculators are storing large quantities of corn in Iowa, Kansas and Nebraska.

Four cargoes of wheat have recently gone from Chicago to Toledo, which is about the only "striking feature" of the wheat trade during the past month.

About a hundred suckers were arrested in one bucket shop raid at Chicago recently; the next day it was raided again and 50 "inmates" captured. Several other raids were made, with promises of more.

A test case is being made of the suit against Kopple Kurnitzki, at Washington, D. C., charged with running a bucket shop. Bucket shops are thriving just now in Washington and a fight is to be made against them.

Chas. E. Hempstead, a salesman, has been dabbling in grain on the Chicago market, and has finally brought suit in the Circuit Court against M. C. Lightner & Co. to recover \$4,850 lost in margins besides his note for \$5,500. Mr. Hempstead has been speculating since Oct. 6, 1891, and is now at the end of his rope.

The grand jury sitting on several bucket shop cases in Chicago have rendered a decision to the effect that there is no evidence of such kind of gambling in the city. Law has made a dismal failure in the campaign against bucket shops, and grain men should now give assistance to the Board of Trade, for its and their own benefit.

The Moffatt Commission Company of Kansas City, Mo., reports an instance of exact agreement in shippers' and destination weights, which seldom happens. A car of corn which originally weighed just 36,000 pounds on a Kansas hopper scale was transferred at Kansas City, went to Chicago, and the returns on it were 642 bushels and 48 pounds, the same, to a pound, as the original weights.

## LATE PATENTS

### Issued on October 22, 1895.

Sorting and Cleaning Machine for Grain or Milling Products.—August Schnetzer, Buda Pesth, Austria-Hungary. No. 548,328. Serial No. 529,853. Filed Nov. 24, 1894.

Machinery for Cleaning or Polishing Wheat or Other Grain.—Alfred H. Beasley, London, England. No. 548,347. Serial No. 532,595. Filed Dec. 21, 1894.

Grain Meter.—Edward Huber and Jacob W. Miller, Marion, Ohio. No. 548,550. Serial No. 548,557. Filed May 8, 1895.

### Issued on October 29, 1895.

Gas Engine.—George F. Conner, Racine, Wis. No. 548,628. Serial No. 533,910. Filed Jan. 5, 1895.

Separator.—Wm. O. Lentz, Mauch Chunk, Pa. No. 548,645. Serial No. 535,855. Filed Jan. 23, 1895.

Explosive Gas Engine.—John R. Bridges, Findlay, Ohio. No. 548,772. Serial No. 472,231. Filed April 28, 1893.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,839. Serial No. 541,087. Filed March 9, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,840. Serial No. 545,878. Filed April 16, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,841. Serial No. 548,951. Filed May 11, 1895.

Automatic Grain Scale.—Francis H. Richards, Hartford, Conn. No. 548,842. Serial No. 541,085. Filed March 9, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,843. Serial No. 541,551. Filed March 13, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,844. Serial No. 542,137. Filed March 18, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,845. Serial No. 542,799. Filed March 22, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,846. Serial No. 545,984. Filed April 16, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,847. Serial No. 546,612. Filed April 22, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,848. Serial No. 550,537. Filed May 24, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,849. Serial No. 551,078. Filed May 31, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,850. Serial No. 551,947. Filed June 7, 1895.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,851. Serial No. 552,197. Filed June 10, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,852. Serial No. 552,520. Filed June 12, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,853. Serial No. 552,678. Filed June 13, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 548,854. Serial No. 558,200. Filed Aug. 5, 1895.

Weighing Machine.—Frank E. Thompson, Hartford, Conn., assignor to the Pratt & Whitney Co., same place. No. 548,855. Serial No. 558,379. Filed Aug. 6, 1895.

### Issued on November 5, 1895.

Mode of and Means for Baling Fibrous Materials.—Thomas H. Bruner, Temple, Texas. No. 549,226. Serial No. 550,522. Filed Dec. 1, 1894.

Gas Engine Igniter.—Gilson W. Roth, Indianapolis, Ind. No. 549,213. Serial No. 528,489. Filed Nov. 12, 1894.

Feed or Root Cutter and Corn Sheller.—John P. Nickodemus, Saginaw, Mich. No. 549,327. Serial No. 564,679. Filed Nov. 26, 1894. Renewed Oct. 4, 1895.

Hemp Brake.—Richard S. Webb, Lexington, Ky., assignor of one-half to Albert Angell, Orange Valley, N. J. No. 549,411. Serial No. 542,453. Filed March 20, 1895.

Malting Apparatus.—Alois Zeckendorf, Riverside, Ohio, assignor of one-half to Wm. F. Potthoff, Cincinnati, Ohio. No. 549,473. Serial No. 537,824. Filed Feb. 9, 1895.





A brewery may be erected at Savanna, Ill.

It is reported that a brewery will be erected at Olympia, Mont.

Michael Murphy has erected a new brewery at Rochester, N. Y.

The Imperial Brewing Co. has been incorporated at Kamloops, B. C.

The Goebel Brewing Co. of Detroit, Mich., will erect a brew house.

The Comox Brewery Co. has been incorporated at Cumberland, B. C.

The James Everard Breweries of New York City have been incorporated.

William Ritter will erect a brewery at Chicopee, Mass., at a cost of \$16,000.

George Schweickhardt Jr. has completed his new brewery at Wauwatosa, Wis.

The Eagle Brewing Co. of Newark, N. J., has succeeded J. R. Harden, receiver.

The Milwaukee Brewery of San Francisco, Cal., has succeeded Luhrmann & Co.

The Wadena Brewing Co. of Wadena, Minn., recently sustained a slight loss by fire.

C. H. Flynn has bought the plant of the Washburn Brewing Co. at Washburn, Wis.

The Wisconsin Malt and Grain Co. has its new elevator at Appleton, Wis., completed.

The Gund Brewing Co. intends to erect an addition to its brewery at La Crosse, Wis.

The Carl Coerper Brewing & Malting Co. of Chicago will build an addition to its plant.

Schmidt & Schwab, brewers of Brisbin, Pa., have dissolved, William Schwab succeeding.

Peter Eickmann has succeeded to Edward Lamel's brewing business at Glencoe, Minn.

The Whirlpool Coöperative Brewing Co. intends to erect a brewery at Niagara Falls, N. Y.

W. R. Togood has succeeded to the brewing business of Christ Aberlie at Alexandria, Minn.

J. Helf's brewery at Kaukauna, Wis., which was recently destroyed by fire, is being rebuilt.

The Star Brewing Co. has been incorporated at Boston, Mass., and will erect an ale brewery.

The Colorado Brewing Co. has been incorporated at Golden, Colo., with a capital stock of \$10,000.

The Consumers' Brewing Co. has been organized at Norfolk, Va., with a capital stock of \$100,000.

The Abbott-Katz Brewing Co. of Brooklyn, N. Y., has changed its name to the Eastern Brewing Co.

The Christ Weyand Brewing Co. intends to erect an addition to its brewery at Buffalo, N. Y.

The Daniel Bermes Brewing Co. is about to erect a brewery at Union Hill, N. J., at a cost of \$60,000.

G. J. Heinrich of Minneapolis has bought the late Geo. Herrall's brewery at Portland, Ore.

Portz & Werner have succeeded to the business of the Jacob Portz Brewing & Malting Co. of Hartford, Wis.

Louis Schmidt & Bro. will soon begin the erection of a brewery at Turnwater, Wash., at a cost of \$60,000.

W. A. Waite & Sons, maltsters of Adams, N. Y., are not running their malt house at Watertown this season.

The Illinois State Board of Health has established rules designed to do away with the feeding of brewers' grains and distillery slops to cattle, but

the brewers hope to be able to prove the wholesomeness of the grains as feed for cattle.

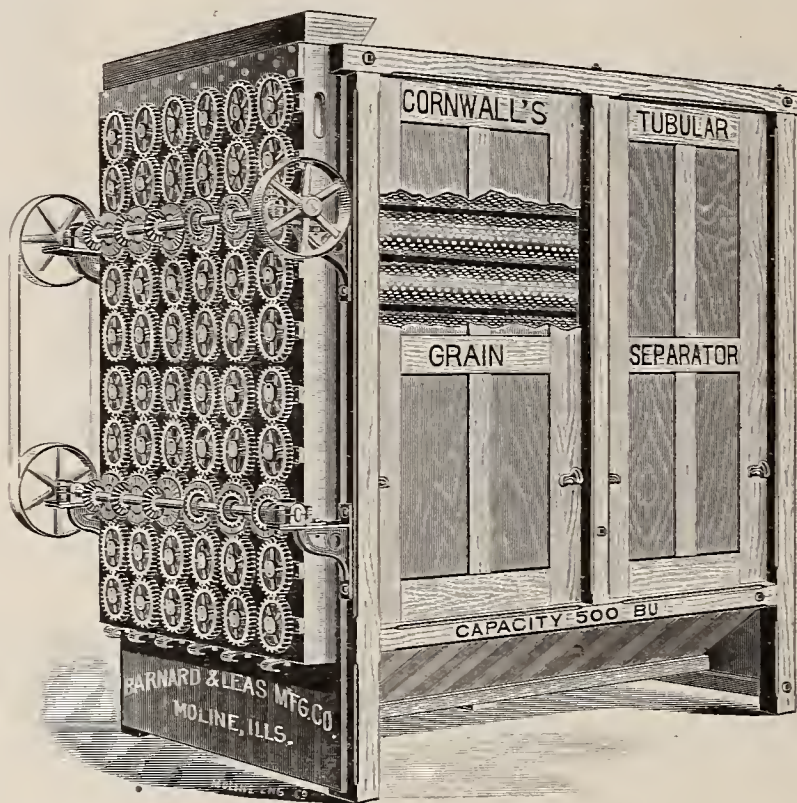
Trupert Ortlieb has succeeded to the brewing business of Henry F. Ortlieb, Philadelphia, Pa.

A. Fredericks & Co. have sold out their brewing business at San Francisco, Cal., to the Jackson Brewing Co.

Lehmann & Miller, brewers of Philadelphia, Pa., have dissolved, Matthias Lehmann succeeding to the business.

The Kennedy & Murphy Brewing & Malting Co. has been incorporated at Troy, N. Y., with a capital stock of \$150,000.

The Rosenheimer Malt and Grain Co. of Kewas-



CORNWALL'S TUBULAR BARLEY SEPARATOR.

kum, Wis., has received over 100,000 bushels of barley this season.

Mingle & Anderson, brewers of Salmon, Idaho, have dissolved partnership, J. H. Anderson continuing the business.

John U. Haltinner is now operating the brewery at Eureka, Cal., which was in the hands of an assignee for some time.

The Waukesha Springs Brewing Co. of Waukesha, Wis., has been placed in the hands of a receiver—F. H. Marx of Chicago.

Theodore Herold, formerly president of the Home Brewing Co. of St. Louis, Mo., intends to erect a brewery in North St. Louis.

The Greenville Brewing Co. is operating the brewery at Jersey City, N. J., which has been in the hands of H. Puster, receiver.

The Kuebler Brewing & Malting Co. of Sandusky, Ohio, has remodeled its brewery in accordance with a new system which it has adopted.

It is said that President Cleveland has decided to recommend to Congress an increase of the tax on malt liquors of one to two dollars.

The American Brewing and Malting Co. of Great Falls, Mont., intends to double the capacity of its brewery and will erect a large malt plant, when it

will manufacture its own malt and sell to the Eastern market.

The M. Funk Brewing Co. of St. Paul, Minn., has recently added considerable machinery to its plant, including malt mill, grain elevator, etc.

It is reported from Great Falls, Mont., that a grain firm has taken a contract to ship 2,250,000 bushels of Montana barley to Germany.

The Chamberlain malt house and flour mill at Rochester, N. Y., have been leased by a Western syndicate and will be put in operation.

The Union Brewing Co. has been incorporated at San Francisco, Cal., with a capital stock of \$100,000. It will operate the Union Brewery.

The Register of Salem, S. D., says that barley is selling for 9 cents a bushel in Rock County, Minnesota, near Sioux Falls, where there is a large brewery.

Leonard Schmidt and Henry Gamer, who are interested in the Manhattan Malting Co. of Butte City, Mont., intend to erect a brewery at Portland.

The Upper Peninsula Brewing Co., which operates breweries at Marquette and Negaunee, Mich., is contemplating the erection of a brewery at Duluth, Minn.

Wm. Smith & Co., brewers of Boston, Mass., have been succeeded by the Wm. Smith & Sons Brewing

Co., which also controls the business of Smith & Engel.

The Seattle Brewing & Malting Co. of Seattle, Wash., is beginning work on an addition to be erected to the Claussen-Sweeney Brewery at a cost of \$3,000.

Valentine Uddermann has purchased the Empire Brewery at St. Cloud, Minn., of which he has been manager for several years, and will carry on the business.

Geo. J. Obermann has severed his connection with the J. Obermann Brewing Co. of Milwaukee, and now represents the Kraus-Merkel Malting Co. of the same place.

George Esslinger & Son, successors of George Esslinger, brewer of Philadelphia, Pa., have let the contract for the erection of a new brew house, mill and malt storage house.

The Scott Malting Co. has been incorporated at Lyons, N. Y., with a capital of \$150,000 to manufacture and sell barley malt. The first directors are Samuel Seymour and W. S. Scott.

American brewers must have Canadian barley, they say, and the annual sales have already begun, a Montreal firm having recently sold 15,000 to 20,000 bushels of choice No. 1 Ontario at considerably



over Montreal quotations. Sales have also been made in the West for the Oswego market.

R. O. Porak is rebuilding his brewery at Sprague, Wash., which was destroyed by fire some time ago.

Gottlieb Ninueman, formerly president of the Muskegon Brewing Co. of Muskegon, Mich., has sold his interest in the business to his partners and will retire, Meeske Bros. succeeding.

The Columbia Weiss Beer Co. was incorporated at Chicago recently and will operate the brewery formerly controlled by the old company, but which had been in the hands of a receiver.

Barley growers of County Cork, Ireland, held a meeting recently to denounce a brewery at Cork, for which they grew their barley crops, for refusing to buy their product and taking foreign barley instead. They decided on boycotting the brewery.

Complaint is again being made of the barley inspection at Chicago as being totally misleading and injurious to the barley trade. Its injustice to both seller and buyer is shown in this instance: Two different shippers send in two cars of barley. One belonging to A. is poor, miserable thin trash, but it inspects No. 3. Being sold on its merits, it brings, say, about 24 cents. The other car, belonging to B., also inspects No. 3, but being of fine, bright color and of good weight, sells, say, at 42 cents. But even worse cases occur where one car inspects No. 4 and sells at 30 cents, while another car that inspects No. 3 sells for but 25 cents.

#### CORNWALL'S TUBULAR BARLEY SEPARATOR.

Cornwall's Tubular Barley Separator illustrated herewith is designed for use in elevators, warehouses, breweries and malt houses. It consists of a series of perforated revolving tubes or cylinders, six inches in diameter, made of pickled and cold rolled sheet steel, having cast iron gudgeons at each end, thus making them very strong and durable. The material is fed into each cylinder through the front gudgeon. As the cylinders revolve, the oats pass through the small perforations, and out through the bottom of the machine, and the barley is discharged out of the end of the cylinder thoroughly cleaned. This machine is not designed as a scalper for removing straws, rose buds, etc., but as a finishing machine for removing the oats from barley that has been cleaned. Every dealer in barley knows how hard it is to get rid of the oats, and will appreciate the work of this machine when he sees the grade of oats it removes, taking all but the very heaviest, which, being as thick as the barley, cannot be removed without wasting the small barley. The coarse dirt having been removed before coming to this machine, leaves the oats it takes out very clean, and it is said some have weighed 40 pounds to the bushel by actual test. It is a handsome, well made, strong and durable machine.

The cylinders are placed far enough apart so that if they clog the trouble can easily be relieved.

The machine is designed especially for removing oats from barley, but cylinders are made with different sized perforations for grading barley. The barley grader is the same machine as the above, but is adapted for the purpose of grading, the holes in the cylinders being large enough to allow the small barley to pass through, and the large to pass out the ends of the cylinders. It is especially designed for use by maltsters and brewers who prefer to malt the large barley by itself, and the small barley by itself. What few large oats are left in the barley will go with the small barley, thus making the large barley absolutely free from oats, a result so much desired by brewers and maltsters.

The machine is also adapted for cleaning flax.

The Duluth Board of Trade has adopted an amendment to its rules removing the compulsory feature of the rule establishing the charge for receiving and selling wheat at 1 per cent per bushel, which states that the old schedule of commission charges are deemed fair and just. It's a poor rule that doesn't work anyway at all, and this particular one had long been inoperative.



Tickets of membership to the New York Produce Exchange are held at \$450.

News items from the different commercial exchanges are always welcome.

The annual assessment of members of the Baltimore Corn and Flour Exchange has been raised from \$20 to \$30.

The grain men of the Jacksonville, Fla., Board of Trade have adopted rules for the grading and inspection of hay, grain, etc.

The New York Produce Exchange has appointed a special committee to receive suggestions of improvements or changes in the by-laws.

The Baltimore Corn and Flour Exchange has amended its by-laws, making No. 1 Northern Spring Wheat deliverable on contracts in that market.

The proposed amendment to the rules of the Milwaukee Chamber of Commerce establishing a grade of wheat to be called No. 2 Northern Spring has been adopted.

The Duluth Board of Trade has increased the charge for clerks' tickets from \$10 to \$35, which makes it cheaper to buy memberships, the dues for which amount to \$25 per year.

Members of the Pittsburg Stock and Oil Exchange have made arrangements to deal in New York stocks and Chicago grain and provisions, quotations of which are now received on the board.

We have received from Secretary T. C. Friedlander the 28th Annual Report of the San Francisco Produce Exchange, together with the statistical report compiled by the secretary for the year ending June 30.

Two members of the Chicago Board of Trade, the other day, resorted to Queensbury rules to settle a difference of opinion regarding a bid for an offer of wheat. Friends interfered before the difference was adjusted and the aggressor was suspended for a week.

The clearing house of the Chicago Board of Trade has recently been found useful in the investigation of the bucket shops. When firms with a big equipment send in only sufficient trades to have their names appear on the sheet they are subject to suspicion.

At a recent meeting of the Montreal Corn Exchange resolutions were adopted urging the government to pass an order-in-council fixing the rate for inspection of grain in carlots at 40 cents, the rate which was maintained before an order made it 60 cents last September. The request was granted.

The grain rules of the Philadelphia Commercial Exchange have been revised, and new rules which went into effect November 1 permit the delivery of No. 1 Northern Spring, No. 1 Hard and No. 2 Red, or parts of each, on contracts. Contracts now call for "contract wheat" instead of No. 2 Red.

The Chicago Board of Trade has adopted a resolution protesting against any advance in grain freights to the seaboard during the closed season of lake navigation, regarding 20 cents on grain to New York as sufficiently high in view of the low prices for grain prevailing throughout the Northwest.

A petition was recently presented to the St. Louis Merchants' Exchange asking that the rule making No. 2 Hard wheat deliverable on contracts for No. 2 Red be repealed. A counter-petition was also presented. The matter was referred to a special committee, which was instructed to suggest a rule which would repeal the section.

The following delegates have been selected to represent the Chicago Board of Trade at the meeting of the National Board of Trade to be held in Washington in January next: Richard S. Lyon, Thomas A. Wright, H. F. Dousman, Wm. J. Pope, Frank G. Logan, Wm. H. Bartlett, Luther W. Bodman, George F. Stone, Charles B. Congdon and B. Frank Howard.

The Milwaukee Board of Trade has troubles of its own regarding methods followed by the local elevator men. Cream City grain dealers have been notified that some of the Milwaukee warehouses are buying and receiving grain direct from country points in defiance of the Board of Trade rules. The operations of one firm have been detected and will be investigated by the directors of the Board. It is thought, however, that it will be difficult to dis-

cipline the elevator proprietors, as their methods of purchase and shipment are carefully planned to evade detection. Two young men who were recently elected members of the Board do the buying and shipping. The one residing at Milwaukee receives the grain and delivers it to the order of the elevator people.

A committee has been appointed by the Chicago Board of Trade to arrange for a reduction in the fees charged for making official Board of Trade weights at private elevators. It has been suggested that if the fee was 15 cents (instead of 50 cents as at present) there would be no difficulty in the way of the universal adoption of the weights.

They have a new idea for posting the grain markets at the Buffalo Merchants' Exchange. As members desired to keep track of the time in connection with sales, especially where a great deal of business is done, as the array of figures becomes confusing, it was arranged that the first quotation after each half hour should be written with yellow chalk.

J. W. Hayes of West Superior has been suspended for a period of six months from the Duluth Board of Trade, "for conduct offensive to the good name and dignity of the Exchange." The charge on which Mr. Hayes was suspended was the reported purchase by him, for a customer, of 1,000 bushels of flax at \$1, while the highest market price on that day in Duluth was 97 $\frac{3}{4}$  cents.

H. H. Bauman was recently unconditionally expelled from the Chicago Board of Trade for the violation of the rules relating to bucket shop business, and for the same reason J. R. Willard of J. R. Willard & Co. was suspended for three years and until he could satisfy the directory that he is not associated with bucketshop people. Mr. Willard only a few weeks ago left the firm of Kennett, Hopkins & Co. to engage in business for himself.

The Chicago Board of Trade has a bucket shop investigating committee which is doing a good deal of work just now, and commission houses who have the least connection with bucket shops are working against their own interests by maintaining them. It is dangerous to be even suspected.

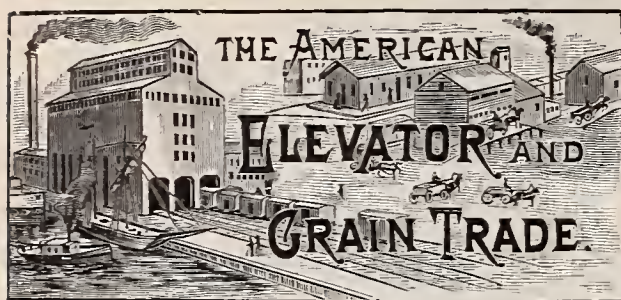
It used to be considered marvelous that an order from the New York Produce Exchange was sent to Chicago, executed and returned within two or three minutes; but now "spreaders" between the New York Produce Exchange and the Chicago Board send, execute and reply to orders in 12 to 15 seconds. The operator stands at the wire of the New York Exchange, a signal is instantly transmitted to the pit on the Chicago Board and another signal makes the response; a specific amount of grain is bought and prices agreed upon before our grandfathers could have conceived of making a sale.

A prominent member of the Grain Receivers' and Shippers' Association of Chicago, who is accepting Milwaukee weights in place of official Board of Trade weights, states that Milwaukee has a better system of weights than Chicago, and furthermore the weights of that city were taken for the reason that in order to get Chicago Board of Trade weights delay would be caused from the necessary hauling of stuff to team tracks. He asserts that it is not contrary to the spirit or letter of the Board rule, and that prominent members of the Illinois Grain Dealers' Association are accepting Milwaukee weights.

The directors of the Chicago Board of Trade, at their meeting on October 29, passed the following resolution in reference to the independent weighing: Resolved, That it is the opinion of this directory that the appointment of a person to weigh grain in an elevator or warehouse exclusively (especially if such appointee be an employee of the proprietor or manager of such elevator or warehouse) does not conform to the requirements of Sec. 10, Rule 22, of the rules of this Board, which contemplates the appointment of a public or disinterested weigher. And, further, it is the opinion of this directory that such an appointment contravenes public policy and is not in conformity with either municipal ordinance or state law.

At a meeting of the directors of the Chicago Board of Trade, held October 29, the following action was taken: Resolved, That under the provisions of Sec. 2 of Rule 4 of the rules of the Board of Trade of the City of Chicago the following regulation be and hereby is adopted. "The duties of official grain samplers shall be confined to the examination and sampling of grain, and shall not be confounded with the duties which belong to inspection or grading of grain. Should such official grain sampler find it necessary or be called upon to certify to the weight, condition, or quality of any grain examined by them they must procure proper forms or blanks from the Secretary of the Board, approved by the Board of Directors. Such form or blank must clearly state on its face that it is not in any manner and must not be considered under any circumstance an inspection certificate."





PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

## MITCHELL BROS. COMPANY

(INCORPORATED.)

## OFFICE:

Howland Block, 184 and 186 Dearborn St.,  
CHICAGO, ILL.

A. J. MITCHELL. - - - Business Manager.  
HARLEY B. MITCHELL. - - - Editor.  
CHARLES S. CLARK. - - - Assistant Editor.

Subscription Price, - - - \$1.00 per Year.  
English and Foreign Subscription, - - 1.50 " "

## ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

## CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., NOVEMBER 15, 1895.

### SHORTAGES DUE TO CARELESSNESS.

All country grain shippers or the men in charge of loading their grain are very careless at times. A rush of business or a hasty preparation of a car to catch that next train causes the loading to be slighted and the shipper suffers the consequences. Frequently the tracks leading into Chicago are strewn with grain and a streak of grain along the side of a track is not uncommon.

This waste grain tells an undeniable tale of remarkable carelessness. In the first place the shipper did not fasten the car doors properly or else he accepted an old, worn-out car, which was not necessary. In the second place the trainmen should be instructed to watch the cars and set out for repair any leaky cars which were losing their loads. A petition from shippers to traffic managers to have this done could result in no harm. The managers may think it is done now, but they are mistaken.

One of the advantages of having official public weighmen is that they watch cars and report any arriving in bad condition or leaking. Chicago weighmen frequently mark their certificates, "Car in bad order, leaking," and the carriers are called upon to stand the loss. If shippers would mark the weight of the grain and the initial and number of the car on a card and nail on inside of the door as is required in Minnesota they would advance their own interests in this matter of correct weights. When the car had been broken open by thieves or strain the weighmen at many points would report the card weight as well as the weight of the remaining grain and shippers would be paid for the full amount.

The charge of carelessness in loading and transporting applies with equal force to all markets, but of late there has been an unusual number of cars arriving in Kansas City in bad order. It is not an uncommon thing to see a number of cars together, the doors of which have been boarded up so loosely that the grain dribbles

out even while the cars are standing. There are many careless practices which go to cause the shortages in shipments, but if the shippers will first correct their own carelessness they can then with more becoming grace call on the carriers and the terminal elevator men to mend their careless ways.

### BUCKET SHOPPING AND THE CHICAGO BOARD.

The Chicago Board of Trade has vindicated its right to public respect by the prompt action of its directors in expelling one member for bucket shop methods and suspending another for having bucket shop affiliations. Several other firms, some of them wealthy ones, are under suspicion and it is currently believed that evidence has been collected by the committee having charge of the matter that may lead to several more expulsions or suspensions. Several of these firms doing a large business, if office activity be an index, have done suspiciously little business on the Board, and the only feasible explanation seems to be that they make "cross trades." At all events the action of the directors in expelling one member and suspending another had an unlooked for result in increasing the business of the clearing house. It is suspected that this was caused by a good deal of business going through the legitimate channels which has been "taken care of" by some of these firms by means of cross trades.

However that may be, the reform commences in the right place. The Board of Trade and its members must themselves be free from suspicion. It must visit its penalties on all members, high or low, found guilty of bucket shopping or having bucket shop affiliations. Nor must it give ear to sympathetic petitions for the reinstatement of disciplined members, because they happen to be "good fellows." We all know why Dog Tray was hung.

And we are glad to notice that commendable scrutiny is being exercised in scanning the records and business connections of applicants to membership. Some of the bucket shop gang are trying hard to break into the Board. So the directors have the double task of weeding out the old tares and keeping new ones from gaining root. The Board is fighting a battle for commercial honor and honesty and no one should waste any sympathy on members or applicants for membership that cannot stand the sifting process.

### SOME POINTS ABOUT CORN.

C. Wood Davis, of Kansas, has written a long letter, accompanied with a number of tables, to an Eastern Senator, on the probable trend of prices for corn. We regret that the letter has been published without the tables. We respect Mr. Davis as a statistician, though we have occasionally taken issue with the conclusions he draws from his own figures. It is quite possible we might do so in the present instance, and certainly would in regard to what he says about wheat. But Mr. Davis calls attention to one fact in regard to corn which certainly has not been emphasized sufficiently.

He asserts, and we see no reason to question his statement, that cotton seed, once a waste product, has already displaced 100,000,000 bushels of corn annually, with a possibility of displacing much more in the immediate future. In other words, the product of 4,000,000 acres of corn has been displaced. One set of figures supplied shows how largely cottonseed oil has supplanted corn; this is the reports of the packing houses which practically furnish all the lard exported, as to the amounts of lard produced, and the comparison with the lard exports. The figures show that in the four years, 1890 to 1894, the amount of lard produced reached 1,752,000,000 pounds, while the exports of "lard"

reached 1,772,000,000 pounds. The figures tell their own story, how one of the chief corn products has been supplanted by what was formerly a waste product.

Mr. Davis estimates our domestic requirements of corn at not more than 23.5 bushels per capita, to which must be added 2.5 bushels to provide meats and other secondary products exported, or a total of 26 bushels per capita, as against 29 bushels in the years 1870 to 1890. With our population at 70,000,000, this implies the annual consumption of 1,820,000,000 bushels of corn. With the rate of consumption obtaining ten and twenty years ago, we would require over 2,000,000,000 bushels. Consequently Mr. Davis thinks that adding the average of our corn exports (56,000,000 bushels) to consumptive capacity, we are likely to carry over from our corn crop everything in excess of 1,880,000,000 bushels. Even excluding the large corn acreage of 1895 from the calculation, the maize area contributing to the supply of the population of European lineage has increased 72 per cent. in 25 years, while the population has increased only 35.6 per cent. This leads Mr. Davis to conclude that corn prices must be lower than fifteen or twenty years ago. On the other hand Mr. Davis maintains that we only need one or two materially short crops of wheat and rye to bring astoundingly high prices for those grains, believing, as he does, that the scarcity already exists, but that it is not appreciated. We would have to differ from Mr. Davis on this proposition, and the other one that the world's requirements of wheat increase 40,000,000 bushels annually. We think the weak point here is that account is not taken of the widening variety of human food among bread-eating peoples; but we have exploited our views on this matter too often to repeat them in this connection.

### THE ERIE CANAL WILL BE IMPROVED.

Election day is passed and the state of New York has declared against the abandonment of the Erie Canal and in favor of the improvement and maintenance of the old freight rate regulator. There is nothing uncertain about it, the vote was very decided, a large majority of the votes polled being in favor of the appropriation of \$9,000,000 for the deepening of the channels and the lengthening of the locks of the state's canals. Nearly one-half of this amount will be immediately available, so if the Department of Public Works is favorably disposed the Erie Canal can be greatly improved at a number of points before the next season of navigation opens.

The members of the grain trade of New York, Buffalo and other points within the state who will be benefited by the lower freight rates which will follow the improvement of the Erie Canal cannot afford to have any portion of the appropriation misspent or squandered in useless work. The great importance of the Erie to the state and to the metropolis in assisting it to maintain its hold upon the export grain trade must not be overlooked.

The Oswego and the Champlain canals are only feeders of minor importance to the small territory through which they pass, and of no value to the grain trade. The rail-carriers of the state would be delighted to see the entire appropriation wasted upon these two channels; it is the Erie which worries them, and its friends can rest assured that the carriers will lose no opportunity to divert as much of the appropriation as possible from it.

The improvement of the Erie, together with the use of electricity for towing the canal boats, which, according to the reports of the recent experiments, was an unqualified success, means a material reduction in the freight on grain from the western lake ports to New York City. A reduction of 40 per cent. seems reasonable,



for with a deeper channel larger boats can be used and all can be loaded to their full capacity. The speed of the boats will be accelerated not only by reason of electrical propulsion, but also on account of the large locks, which will permit more boats to be locked through at the same time. Increasing the speed will also increase the carrying capacity of the canal as well as reduce the trip expenses of the boatmen. Mechanical experts who have investigated the matter claim that the use of electrical tows will reduce the expense of towing from Buffalo to Albany 82 per cent.

Taking everything into consideration the friends of the Erie and low freight rates to the seaboard should have glad hearts. The railroad pool has been so remarkably successful for many years in inducing the state government to ignore the needs of the Erie that the announcement of the change in the state's policy seems almost too good to be true.

According to the report of the Bureau of Statistics the value of breadstuffs exported in October was \$12,213,353, against \$9,851,064 in October, 1894; and during the ten months ending October breadstuffs exported were valued at \$96,508,422, against \$103,942,000 for the ten months ending October, 1894, the valuation being \$41,420,612 during the four months ending October, against \$37,583,374 for the same time in 1894. Exports of grain in October compared with those of October, 1894, estimated in bushels, were: Wheat, 6,087,452 against 7,607,687; corn, 7,113,494 against 699,080; oats, 183,703 against 54,125; rye, 13 against none in October, 1894; barley, 841,751 against 251,273; and the exports for the ten months ending October, compared with the same time of the preceding year, were: Wheat, 53,914,874 against 59,001,064; corn, 40,830,141 against 37,179,563; oats, 1,574,594 against 473,614; rye, 668 against 232; barley, 2,591,277 against 2,015,246. In the ten months ending October 31 there were exported 11,580,005 against 13,221,358 barrels of wheat flour; 27,359,529 against 9,176,971 pounds of oatmeal; and 202,515, against 220,604 barrels of cornmeal during the same ten months of 1894.

### ELEVATOR FIRES FROM LOCOMOTIVE SPARKS.

Readers will notice that a larger number of elevator fires than usual is chronicled in this issue; in fact, we believe the list is the longest we have ever published in a single month. One contributing cause, and a very serious one, was the general prevalence of dry weather extending practically over the entire grain handling belt. Frame structures were dry as a bone and the application of a spark was almost sure to lead to a disastrous fire.

At least three of the elevator fires noticed, one in Illinois, one in Minnesota and one in North Dakota, were directly traceable to locomotive sparks. A flour mill fire in Nebraska is traceable to the same cause. Elevators and steam flour mills are almost peculiarly exposed to danger from this source. They are necessarily built close to the railroad and very often on its right of way. Prudence dictates that every precaution be taken to minimize the hazard of fire. In such weather as we have had in the central west during the past two months, a shower of sparks from a locomotive, falling upon a dry shingle roof, or the dry refuse usually found collected around a warehouse, is pretty sure to cause a fire.

How great this liability is anyone may see for himself by riding some distance along any railway during a severe dry spell. Everywhere he will see patches of stubble and fences that have fed fires so long as the material lasted. Many railway companies themselves recognize the danger, though they don't parade the matter in public, and take such precautions as they can

to guard against the danger. Their liability for such fires, when they can be traced to locomotive sparks, is undoubted. To overcome this, the railways have inserted a clause in leases of right of way to elevators and other establishments, waiving the railway's liability for fires from this source. An interesting case of this kind is reported in this issue, involving an elevator fire, where the insurance companies having paid the loss are attempting to hold the railway liable for the loss, in spite of the clause in the lease. The Iowa court held that the clause in the lease was contrary to public policy and hence the railway was liable for the loss. The case was carried to the United States Court of Appeals at St. Paul, which affirms the right of the railway to insert such a clause in its leases. The insurance companies will carry the matter into the Supreme Court of the United States.

But whatever phase the question of liability under the law may assume, the danger is undoubted. Elevator men should appreciate it and guard against it by every possible precaution.

### WANT A RECIPROCAL DEMURRAGE CHARGE.

The scarcity of cars and the resulting delay of grain and flour in transit have had a beneficial effect upon the receivers of at least one grain market and that is Cincinnati. At that point the receivers and shippers have long submitted to the exactions of the Car Service Bureau without any objection, and now that all of their grain is being delayed in transit they commence to appreciate the one-sidedness of the demurrage charge as now levied.

The reciprocal demurrage charge which has been in force in Germany for several years has gone far toward reducing delays. It is the fairest remedy ever offered for the relief of both shipper and carrier, and no railroad company which is inclined ever so little to treat its patrons justly will refuse to pay the same fee for delaying freight in excess of forty-eight hours which it now collects for the delay of its cars.

The railroad companies claim that the whole trouble is due to the fact that they are experiencing considerable trouble in obtaining water for their engines. That does not excuse the offense or relieve the trouble one iota, but strengthens the case of the receivers, who have frequently paid demurrage because their teamster could not get water and took beer, thus delaying the unloading of the car several days.

The Cincinnati receivers have suffered so many losses recently on account of delay in delivery of grain that they have been prompted to devote considerable time to an attempt to devise a practical plan of collecting a demurrage fee from the carriers. Holding back enough of the freight on each delayed shipment to pay for the delay at the demurrage rate charged by the carrier for delays by patrons would place the burden of proving it was not a just deduction upon the carrier. It would be impossible to get any fair-minded judge to decide against the receivers. The carrier, of course, would maintain that it levied the demurrage charge in the interest of the shipping public, so as to prevent its cars being used as storehouses and to accelerate the movement of freight. The charge for delay deducted by the receivers would surely have the same effect, but they might be honest enough to admit they were prompted by avaricious motives in making the deductions.

There is one drawback to a reciprocal demurrage charge which might prove a disadvantage to shippers in some cases. If the custom of collecting for delays was established and acquiesced in by carriers, it might prove a bar to suits for damages in cases where delay caused heavy loss to shipper on account of not having grain at destination within a certain time. Any damage to the grain resulting from the de-

lay would still be actionable regardless of the demurrage charge.

### "DISINTERESTED" WEIGHTS AT CHICAGO.

If there ever was a sincere, honest effort made to secure any reform in the grain trade, it is the fight for the services of disinterested weighmen at Chicago. The Chicago Board of Trade has had a weighing department for years, and its members have been above reproach, yet it succeeded in having its weighmen employed at only a few elevators.

The continued frequent complaining against the shortages in grain shipments to Chicago finally took the form of a resolution adopted at the June meeting of the Illinois Grain Dealers' Association, and was soon followed by the appointment of a committee from its executive board to visit Chicago and petition the receivers and the Board of Trade to secure the employment of public weighmen at all elevators. The Board of Trade members gave the move their hearty support and adopted several rules to secure public weighmen. The receivers, with the exception of probably six turncoats, are still standing firmly by their first agreement to sell no grain to parties who would not give public weights, and consequently some of the buyers who maintain that all weighmen except their own are dishonest, have experienced some trouble in getting what grain they want.

The Illinois Grain Dealers' Association has maintained from the first, and rightly, that the shippers' weights must be accepted or else the official weights of the Public Weighmaster of the Chicago Board of Trade. No proposition could be fairer, and no elevator man who is guided by an honest purpose would refuse to accept it. The elevator men were not slow to perceive that they could not refuse to comply with the request and remain above suspicion of rank dishonesty, so with the exception of four or five all applied for the services of the Public Weighmaster. These few kickers made a feint of giving honest weights by having their old weighmen clothed with city authority. This does not alter the case a particle, and the friends of honest weights have declined to accept this action as a compromise.

To-day the charge for weighing grain in transfer houses and cars has been reduced from 50 to 30 cents, and the charge for weighing at some of the large houses where the receipts average over 100 cars daily has been reduced to 15 cents a car.

The friends of disinterested weighmen have might as well as right on their side and they would be ridiculous to recede one step. They should stand firmly together and they will not have to make any sacrifices long. The Illinois Grain Dealers' Association and its executive committee deserves to be highly commended for the very aggressive work done in behalf of honest weights. The Association has not only sent committees to Chicago but has flooded the state and parts of Iowa with circular letters asking other grain dealers to instruct their commission men at Chicago to sell only to those who will give public weights. Each one of the three organizations has done good work and the desertion of a few receivers is the only weakness shown in their ranks.

Country shippers who are not members of the state association have shown a reluctance to send the proper instructions to their commission man, which shows that they are blind to the interests of their own business. Selfish narrow-mindedness may win a small reward for a short time, but short weights will soon sweep it away. No one connected with the trade should hesitate a minute to give the move his hearty endorsement, and every country shipper should make haste to give it his support by refusing to sell grain in the Chicago market, except that it be weighed by the Public Weighmaster.



# EDITORIAL

## MENTION

Buffalo has been enjoying a grain blockade that seems like old times. For a number of days the receipts averaged a million bushels per day.

Trade news items are always welcome. Please do not fail to send us the particulars of anything of interest to the grain trade which occurs in your district.

The visible supply reports should be extended to include all grain at the principal grain centers. Let that in the private houses be given in a supplementary report.

The bumper corn crop of 1895, which was to be the largest on record, is now placed at about 2,150,000,000 bushels by some authorities, which is very little above that of 1889 and 1891.

Wheat buyers at several stations in the Northwest have been indulging in a foolish competition to determine who can pay the highest price. At Sioux Falls, S. D., over 250,000 bushels of wheat were marketed in a very short time.

The Simpson & Robinson Co. of Chicago is suing the Standard Elevator Co. of Minneapolis for damages for the infringement of its patents on distributing spouts in the perfection of which it has expended a large amount of money.

The Public Weighmaster at Chicago says he does not keep one weighman in the same house all the time, but changes them about frequently. This is a good practice, as it reduces the opportunities for collusion between dishonest weighmen and elevator men to beat the shipper.

Farmers of South Dakota are renting grain sacks by the thousands to haul their grain to market in. In very few districts are grain dealers or millers loaning sacks. This antiquated practice became such an unbearable burden that the dealers were finally forced to call a halt.

The Chicago Board of Trade has protested against an advance in the rate on grain to the seaboard after the close of navigation. Twenty cents a hundred is enough any year, and with the present low prices the carriers must be content with that rate or secure little to carry without cut rates.

The country has been blest with a big crop of potatoes and instead of striving to learn of some profitable way to utilize them the average farmer is leaving them in the ground to rot. His live stock might suggest that potatoes are good boiled. The crop is the largest ever grown in this country, the average yield being 100.7 bushels per acre.

The Canadian Pacific as well as the American roads are experiencing considerable difficulty in handling all the grain offered. An effort is made to clean and scour all the low grade wheat arriving at Ft. William and as the cleaning elevator at Port Arthur near by has not a large cleaning capacity all of the grain is delayed. A few new cleaners of large capacity or even a new cleaning elevator would be a trifling cost for an efficient remedy for this trouble. The

road will provide the necessary facilities for handling its grain traffic when it is compelled to by the competition of the rail and water route via Duluth.

That the Chicago Board of Trade's warfare upon bucket shops has not been without effect is witnessed by the fact that a number of people having bucket shop affiliations have lately applied for membership in the board and have had their applications rejected. They evidently want to do their bucket-shopping under the guise of members.

The Great Northern Railroad is not prejudiced in favor of the man-with-a-scoop. In fact, it will not grant him cars to be used as warehouses. This is an action in favor of the regular elevator man that many of the other grain carriers could imitate with profit to themselves and fairness to the man who has erected and operates a warehouse for them without pay.

The Chicago city government has been trying to root out the bucket shops and has presented ample evidence to several grand juries, but as yet has been unable to get any indictments returned. Bucket shop keepers seem to have a host of friends and plenty of money, as recent arrests at St. Joseph, Mo., Washington, D. C., and several other points have resulted in no reform.

It is just as fair, just as reasonable, for the dealer who buys or sells futures on 'Change to demand the names of the parties his commission man buys from or sells to as it is for the country grain shipper to demand the name of the buyer of his grain each time he makes a shipment. The careful commission man who is honestly disposed will give it without being asked for it and none will refuse to give it each time. The rules of several commercial exchanges require it, but like the Interstate Commerce Law they are not enforced.

It is to be regretted that the receivers and shippers of St. Louis have not enough regard for the interest of their patrons to organize an association so as to be able to advance more effectually the interests of their customers, as well as of their own business. The elevator capacity of St. Louis will be greatly increased this season and may be followed by an increase in trade, but the chances of securing a larger trade can be materially increased by the organization of an active receivers' and shippers' association.

Of course there is plenty of lamentation all over the corn country over the failure to sell old corn when it was in the neighborhood of 50 cents a bushel. One authority says that Piatt County, Ill., is \$300,000 poorer through the failure of farmers to sell their old corn at the high prices of last spring. Well, suppose all the farmers with old corn had been wise and started in to sell their old corn at 50 cents: what would have happened? How long would the price have held? It would have scooted down like a boy getting out of a neighbor's apple-tree.

The terminal elevator men possessing a list of country elevators with and without facilities for weighing shipments are very much opposed to disinterested weighmen being placed in charge of the scales, but they must come to it. The weighing of grain at every grain center should be in the hands of a public weighmaster and as soon as possible other states should follow the example of Minnesota, establish a public weighing department, take this work out of the hands of the public elevator men and employ scale experts to keep the scales in order and

inspect scales at country points. The elevator men of that state and those shipping to the central markets of that state have no trouble with weights as compared with those of any other state. They seldom have cause for complaint.

The flour mill mutual fire insurance companies during the last ten years have saved their members at least fifty per cent. of what the same insurance would have cost them in reliable stock companies, and surely an elevator mutual fire insurance company, if well managed, could save as much. An elevator has comparatively little machinery in it and has not a forest of spouts which serve as draft tubes to facilitate the communication of fire from one story to the rest of the mill. The elevator men need an energetic leader who understands the mutual fire insurance business.

Prof. C. C. Georgeson of the Kansas State Agricultural College advises farmers to co-operate and hold their corn for higher prices. His plan is feasible enough, so far as working details are concerned. He would have the farmers organize associations and advance a portion of the current price to those who must sell, and then have the associations hold the corn. The whole trouble is the immensity of the crop and the impossibility of organizing any very large number of corn growers into associations of this kind. And if the officers of an association should make a mistake as to the proper time to sell, it would be the deathblow to that branch.

Empty cars are scarce in the Southwest and even scarcer in the Northwest, where the country elevators are full and the farmers are compelled to haul their grain back to their farms for lack of storage room at the stations. Elevator men are continually fighting for cars and the traffic manager settles the old question of how to properly distribute cars among shippers? in the same old way, that is by giving cars to those who do not have to depend upon his line to transport grain to market. If the elevator men were paid the same fee for the delay of their grain at initial point and in transit as they pay carrier, some of them would soon become rich.

Some days since it was rumored that the Illinois Central Railroad had issued an order that its box cars should not be loaded at interior points for Chicago. The officials when interrogated on the matter, denied that any such order had been issued or was contemplated. All the same in a day or so the order was sent out. Such an order is clearly against the law. The purpose of the Central in issuing it is apparent; unless indeed it is afraid to load some of its old box cars of the vintage of 1849, for fear of disastrous consequences. Some of its rolling stock is in a state of decrepitude that is painful to look upon.

In noticing a new conveyor designed for loading coal from one vessel to another the Marine Record takes occasion to preach a short homily on the immense advantages enjoyed by the lake fleet in the matter of terminal facilities. To emphasize the matter it gives the following: "One day in August the steamer Masaba arrived at Erie, Pa., at 4:30 a. m. On that day she discharged 2,250 tons of iron ore. She then proceeded to Ashtabula, a distance of 48 miles, and loaded a partial cargo consisting of 1,232 tons of coal, and she was actually on her way to Lake Superior before dark on the day of her entry. To express this feat of mechanical ingenuity in other words, a total of 3,752 net tons of freight was handled, and the steamer was entered and cleared from two ports, nearly 50 miles distant, all within a period of 15 hours." Consequently the man who expects to improve on present loading and unloading



facilities should rise with the lark and do some heavy thinking.

Buffalo is having its annual grain blockade and still the pool insists on keeping a number of its elevators in idleness, so that the grain will be held back until the canal is frozen over and the railroads can exact higher rates for its transportation. A few modern floating transfer elevators in Buffalo harbor would, if operated independent of the pool, prove a blessing to the grain trade as well as to the canal boatmen.

Minneapolis grain men did not succeed in establishing a grain dealers' mutual fire insurance company but the attempt was the means of securing a reduction in insurance rates. However, the reduction may not last very long, as the agents are already complaining. When the enthusiasm for the organization of a mutual company has died out the agents may be relied upon to squeeze the trade for all it will stand.

We submitted a sample of the "new edible grain illustrated" on the first page of this number to the Agricultural Experiment Station of Illinois and G. P. Clinton, assistant botanist, informs us that "the grain is either the large cane (*Arundinaria macrosperma*) or the small cane, a variety of the large cane known as *suffruticosa*, both occurring in the Southern States. The large cane grows to a height of 40 feet, the small cane being from 2 to 10 feet in height. The large cane rarely seeds." So it seems that while this grain or seed is new to a district of Alabama, it is not new to science.

An Illinois farmer makes some interesting statements regarding the chinch bug. For one thing, he says that invariably the cleaner the corn, the greater the ravages of the bugs. Another is that the variety of smartweed so commonly found growing in the moist places in corn fields is an antidote to the chinch bug, and that it cannot exist where this weed is found growing. Unfortunately, he thinks, this weed is pretty nearly extinct in the corn fields; but buckwheat is next of kin, and he says that where buckwheat is planted in the corn the chinch bug will not work in the latter.

The official sampler of the Chicago Board of Trade who was recently detected in issuing inspection certificates for new oats was let off with a reprimand. To guard against any future trouble in this matter the Board of Directors adopted a resolution to the effect that "The duties of the official grain samplers shall be confined to the examination and sampling of grain, and shall not be confounded with the duties which belong to inspection or grading of grain. Should such official grain samplers find it necessary or be called upon to certify to the weight, condition or quality of any grain examined by them, they must procure proper forms or blanks from the secretary of the Board, approved by the Board of Directors. Such form or blank must clearly state on its face that it is not in any manner, and must not be considered under any circumstances, an inspection certificate."

Three grain buyers of Waverly, Minn., instituted war the other day, and began to pay 1 cent above the price justified by the price ruling at grain centers for grain, then 2 cents, then 3 cents. And the farmers speculated on the rise.

A replevin suit which was first brought in 1890 was recently brought up in the Circuit Court at Kansas City, Mo. The Johnson-Brinkley Commission Co. brought suit to recover three cars of wheat from the Missouri Pacific R. R. It was decided in favor of the defendant; it went to the Court of Appeals and the lower court was sustained; the latter's decision was reversed by the Supreme Court and the case remanded to the Circuit Court.

## Trade Notes.

When congestive chills o'ercome the trade,  
When its pulse-beat seems to sink,  
The best corrective man has made  
Is a dose of printers' ink.

Trade news is always welcome.

J. E. Stevens has succeeded James R. Young as Southwestern agent for the Edw. P. Allis Co., with headquarters at Kansas City, Mo.

The George J. Fritz Foundry and Machine Co. of St. Louis Mo., has been incorporated with a capital stock of \$35,000. The incorporators are M. Fritz, E. H. Fritz and Martha Kalbfleisch.

A company has been organized at Independence, Mo., by A. L. McCoy, Henry Reick, W. S. Loar, J. E. Page, E. R. Gill, W. L. Webb and J. A. Sea, to manufacture gas and gasoline engines.

The Charter Gas Engine Co. of Sterling, Ill., reports that it has shipped within a short time 12 No. 5 Charter Engines to nine different states, an unusual distribution over the Union of one size "Charter" in so short a time.

We are indebted to the Link-Belt Machinery Co. of Chicago for an invitation to visit and inspect the electric mining plant of the Essen Coal Co. in its mines at Federal, Pa. It is said to be the most extensive electric coal mining plant in the world.

The Todds & Stanley Mill Furnishing Co. of St. Louis, Mo., has been rushed with business for some time. The work on hand includes a number of contracts for new elevators and flour mills. The company is engaged in remodeling and repairing a number of old plants.

W. R. Reid, miller of Washburn, N. D., has invented a flax cleaning machine which he says will clean without waste flax containing 20 to 30 per cent. down to 4 per cent. of all kinds of dirt, one operation sufficing, at the rate of 200 bushels per hour, and elevating the grain 60 feet, with one-horse power.

Geo. H. Cormack of Rockford, Ill., has bought the patents, good will and business of Geo. H. Rich, manufacturer of the well-known Rich Grain Grading and Cleaning Machines, and will succeed to the business. The style of the new firm will be G. H. Cormack & Sons, and the business will be continued at the old stand, 47 South Clinton St., Chicago.

The I. H. Lowry Company, successors to the Lowry-Kelly Company, grain commission merchants of Milwaukee, has removed to the Mitchell Building, where it has light, cheerful offices newly furnished throughout. Recently the new company has been sending out vest pocket note books bound in morocco which have attracted considerable attention.

The E. H. Pease Manufacturing Co. writes us that it has just made a foreign shipment of 18 of its grain cleaners. During this year the Pease Co. has shipped over ten large carloads of them to foreign countries. The Russian government recently purchased twenty-one of the largest size Excelsior Oat Clippers and twenty-two of the largest size Excelsior Dustless Elevator Separators.

The B. S. Constant Company at Bloomington, Ill., writes us that it has recently moved into a new building. In its new quarters the company has a floor space of 70x112 feet, and with the additional room has ample facilities for taking care of its growing business. New wood-working machinery has been added. Orders for the Constant Feeder have been coming in rapidly.

N. P. Bowsher, South Bend, Ind., reports the prospect for trade in his "Combination" Feed Mills as being excellent. Quite a number of sales have been made during the past summer and fall to parties who were among purchasers of the past few years. These duplicate orders certainly speak well for the mills. Those who visit the Atlanta Exposition can inspect these mills at Column D, 13-34, in

the Transportation and Implement building. Mr. Bowsher is always ready to furnish descriptive circulars and any desired information to those who address him at South Bend.

The W. C. Leffel Co. of Springfield, Ohio, has formed a new organization, which is known as the Trump Manufacturing Co. The company has a capital of \$100,000 and will manufacture engines and water wheels. The officers are John J. Hoppes, president; Wm. Conklin, vice-president; Fuller Trump, general manager; Paul A. Staley, treasurer; Percy Norton, secretary.

J. F. Zahm & Co. of Toledo and Detroit are sending their friends bright aluminum medals, on one side of which is the representation of a bull's head, and bears are words, "This side up buy wheat." On the other side is the representation of a bear's head and the words, "This side up sell wheat." Zahm & Co. claim to have discovered how their friends can hit the mark with this "discovery."

The Minneapolis Iron Works at Minneapolis, Minn., owned by D. M. Gilmore, in addition to the manufacture of grain elevator machinery, does the largest boiler business of any shop in Minneapolis. A large business is also done in pipe, steam and gas fitters' and general engineers' supplies. A new heater for water tanks has been recently placed on the market. The machine shops are kept very busy and the business is developing very rapidly. The sales so far this year exceed the sales of last year by over 50 per cent. The firm has now on hand a number of large contracts for pipe fittings, boilers, penstocks, oil tanks, etc., in and about Minneapolis. D. M. Gilmore, the owner of the works, went to Minneapolis in 1857 and has been identified with the growth and the interests of the city since that time. Since his connection with the Minneapolis Iron Works the business of that establishment has been placed upon a very prosperous footing and the shops have been kept busy.

## Grain Dealers' Associations.

### THE GRAIN RECEIVERS' AND SHIPPERS' ASSOCIATION OF CHICAGO.

President, John Hill Jr.; vice-president, I. P. Rumsey; secretary, P. H. Eschenbarg; treasurer, Wm. Nash.

### CAR GRAIN ASSOCIATION OF BUFFALO.

President, Charles Kennedy; vice-president, J. H. Rodebaugh; treasurer, W. V. Downer; secretary, S. W. Yantis.

### THE GRAIN RECEIVERS' ASSOCIATION OF MINNEAPOLIS.

President, A. M. Woodward; vice-president, W. G. Nicholls; secretary, Wm. B. Mohler; treasurer, H. W. Commons.

### SOUTHERN ILLINOIS GRAIN BUYERS' ASSOCIATION.

President, W. D. Sparks, Alton; vice-president, J. E. Duffield, Jerseyville; treasurer, W. B. Pierce, Alton; secretary, G. E. Brown, Brighton.

### ILLINOIS GRAIN DEALERS' ASSOCIATION.

President, John Crocker, Maroa; vice-president, E. R. Ulrich Jr., Springfield; treasurer, F. M. Pratt, Decatur; secretary, B. S. Tyler, Decatur.

### CENTRAL IOWA GRAIN DEALERS' ASSOCIATION.

President, Allen Smith, Boone; vice-president, B. A. Lockwood, Des Moines; treasurer, M. McFarlin, Des Moines; secretary, M. T. Russell, Des Moines.

### OHIO GRAIN DEALERS' ASSOCIATION.

President, Daniel McAlister, Columbus; vice-president, J. B. Van Wagener, London; treasurer, Jesse Brundige, Kingston; secretary, Huntington Fitch, Columbus.

### GRAIN SHIPPERS' ASSOCIATION OF NORTH-WESTERN IOWA.

President, T. M. C. Logan, River Sioux; vice-president, E. M. Parsons, Carroll; secretary and treasurer, F. D. Babcock, Ida Grove; assistant secretary, F. G. Butler, Schaller.



## RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since October 15 has been as follows:

October.	NO. 2 <sup>+</sup> R.W. WHEAT.		NO. 2 SFG WHEAT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 3 BARLEY.		NO. 1 <sup>+</sup> FLAX SEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15...	60	63 1/2	60 1/2	60 1/2	2 3/4	30	18 1/2	18 1/2	39	39	26	22 1/2	95	95 1/2
16...	59 1/2	63 1/2	60 1/2	60 1/2	3 1/4	30 1/2	18 1/2	18 1/2	39	39	28	28	95	96
17...	59 1/2	63	60 1/2	61	30	30 1/2	18 1/2	18 1/2	39 1/2	39 1/2	28 1/2	29	95	95 1/2
18...	60 1/2	63 1/2	60	60	30 1/2	30 1/2	...	...	39 1/2	39 1/2	32	32	94 1/2	95
19...	60	63 1/2	60	60	30	30 1/2	...	...	38 1/2	39 1/2	27	31	94	94
20...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21...	59 1/2	63	59 1/2	59 1/2	29 1/2	30 1/2	17 1/2	18	39	39	27 1/2	30	93 1/2	93 1/2
22...	60	63 1/2	59 1/2	60 1/2	30 1/2	30 1/2	18	18	39	39	30	30	93	93 1/2
23...	60 1/2	63	60 1/2	60 1/2	30 1/2	30 1/2	18 1/2	18 1/2	39 1/2	39	30	30	93	93
24...	61	63 1/2	60 1/2	60 1/2	31 1/2	31 1/2	18 1/2	18 1/2	...	...	30	31	92 1/2	93
25...	60 1/2	63 1/2	60 1/2	61	3 1/4	32 1/2	18 1/2	18 1/2	38 1/2	38 1/2	28	30	9 1/2	92
26...	60 1/2	63 1/2	60 1/2	60 1/2	31 1/2	32	...	...	38 1/2	38 1/2	30	31	90 1/2	91 1/2
27...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28...	60 1/2	63 1/2	59 1/2	60 1/2	30	30 1/2	18 1/2	18 1/2	38 1/2	38 1/2	31	35	89 1/2	91
29...	59 1/2	62 1/2	59 1/2	60 1/2	29 1/2	30 1/2	18 1/2	18 1/2	38 1/2	38 1/2	27	31	89 1/2	90 1/2
30...	58 1/2	61 1/2	58 1/2	59 1/2	29 1/2	30 1/2	18 1/2	18 1/2	37 1/2	37 1/2	27	28	90	90 1/2
31...	59 1/2	63	58 1/2	58 1/2	30	30 1/2	...	...	37	37	...	...	91	92 1/2
1...	58 1/2	62 1/2	58 1/2	59	29 1/2	29 1/2	18 1/2	18 1/2	37	37	28	31	92	92 1/2
2...	58 1/2	62 1/2	58 1/2	58 1/2	28 1/2	29 1/2	18 1/2	18 1/2	37	37	...	...	92	92 1/2
3...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4...	58 1/2	61 1/2	58	58 1/2	28 1/2	28 1/2	18 1/2	18 1/2	...	...	...	...	91 1/2	92 1/2
5...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6...	58	62	58 1/2	58 1/2	29	29 1/2	18 1/2	18 1/2	37	37	30	30	91	92
7...	58 1/2	62	58 1/2	58 1/2	29 1/2	29 1/2	18 1/2	18 1/2	37	37	...	...	91	92
8...	58	62 1/2	58 1/2	58 1/2	29 1/2	30	18 1/2	18 1/2	...	...	...	...	91	91 1/2
9...	58 1/2	62 1/2	58	58 1/2	29	29 1/2	18 1/2	18 1/2	37	37	...	...	90 1/2	91 1/2
10...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11...	57 1/2	61 1/2	57 1/2	57 1/2	28 1/2	29 1/2	18 1/2	18 1/2	36 1/2	36 1/2	...	...	91 1/2	91 1/2
12...	57	61	57	57 1/2	29	29 1/2	18 1/2	18 1/2	36	36	...	...	90 1/2	91
13...	...	...	...	...	...	...	...	...	...	...	...	...	91 1/2	91 1/2
14...	...	...	58 1/2	58 1/2	29	29 1/2	18 1/2	18 1/2	36 1/2	36 1/2	27	28	91	92 1/2
15...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

\* Holiday. † Nominal range. ‡ No. 1 Northwestern on track.

During the week ending October 19 Prime Contract Timothy sold at \$3.55@3.75 per cental, Prime Contract Clover Seed at \$6.75@7.00, Hungarian at 60@70 cents, German Millet at 60@70 cents, buckwheat at 80@95 cents per 100 pounds.

During the week ending October 26 Prime Contract Timothy sold at \$3.50@3.60 per cental, Prime Contract Clover Seed at \$6.85@6.90, Hungarian at 60@70 cents, German Millet at 60@70 cents, buckwheat at 80@95 cents per 100 pounds.

During the week ending November 2 Prime Contract Timothy sold at \$3.60@3.80 per cental, Prime Contract Clover Seed at \$6.85@6.90, Hungarian at 60@70 cents, German Millet at 60@70 cents, buckwheat at 80@95 cents per 100 pounds.

During the week ending November 9 Prime Contract Timothy sold at \$3.60@3.75 per cental, Prime Contract Clover Seed at \$7.00@7.10, Hungarian at 60@80 cents, German Millet at \$0.60@1.00, buckwheat at 80@90 cents per 100 pounds.

## RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month ending October 31, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	168,600	87,600	109,900	71,400
Corn, bushels.....	1,788,540	823,200	791,700	54,500
Oats, bushels.....	3,129,900	939,200	2,733,600	810,600
Barley, bushels.....	345,800	390,100	299,600	303,900
Rye, bushels.....	21,000	18,600	14,400	6,000
Mill Feed, tons.....	1,110	345	6,264	5,919
Seeds, lbs.....	3,300,000	480,000	1,863,360	362,700
Broom Corn, lbs.....	435,000	300,000	373,450	501,800
Hay, tons.....	5,410	3,260	2,000	1,591
Flour, barrels.....	22,650	26,100	29,850	22,500
Spirits & Liquors, bbls.	2,780	1,707	17,636	10,104
Syrup & Glucose, bbls.	1,074	1,500	42,432	41,731

## RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 4 weeks ending November 2, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	1,549,020	786,283	830,500	53,450
Corn, bushels.....	68,250	76,600	14,150	5,200
Oats, bushels.....	755,000	431,000	767,465	349,350
Barley, bushels.....	2,255,275	1,811,670	1,189,884	1,118,393
Rye, bushels.....	135,975	96,840	50,465	53,021
Grass seed, pounds.....	306,020	675,552	248,420	95,640
Flaxseed, bushels.....	97,700	84,223	38,280	67,280
Broom corn, lbs.....	...	...	...	...
Hay, tons.....	1,623	1,446	39	154
Flour, barrels.....	278,770	156,600	315,114	215,972

## RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during October, 1895 and 1894, of seeds, hay and broom corn:

Repts.	Timothy, lbs.	Clover, lbs.	Other grass seeds, lbs.	Flaxseed, bu.	Broom corn, lbs.	Hay, tons.
1895 ..	6,214,134	565,785	497,660	2,326,484	2,975,323	36,129
1894 ..	5,591,120	1,612,053	486,491	901,532	5,848,376	28,009
Shipments.	...	...	...	...	...	...
1895 ..	5,199,089	235,137	517,568	1,307,165	1,167,595	5,144
1894 ..	2,741,952	1,022,903	767,912	413,057	1,266,683	2,784

## RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 4 weeks ending November 2, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	13,000,420	8,727,330	2,762,220	482,320
Corn, bushels.....	35,330	97,990	1,590	5,980
Oats, bushels.....	705,020	561,100	378,930	230,290
Barley, bushels.....	179,190	91,810	26,410	63,500
Rye, bushels.....	47,140	28,890	21,770	46,336
Flaxseed, bushels.....	509,500	141,420	223,570	98,120
Hay, tons.....	2,288	2,973	48	70
Flour, barrels.....	13,889	9,629	1,091,084	893,047

## RECEIPTS AND SHIPMENTS AT BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month ending October 31, as compared with the same period of the preceding year, were, according to Wm. Thurstone, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts by lake.		Shipments by canal.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	6,649,200	5,508,348	1,236,278	4,051,304
Corn, bushels.....	6,953,430	2,064,427	203,433	707,680
Oats, bushels.....	3,522,950	1,571,205	243,143	1,262,654
Barley, bushels....	2,751,110	2,535,205	1,182,538	980,501
Rye, bushels.....	200,900	51,400	...	23,519
Grass Seed, bags..	2,711	19,520	...	...
Flaxseed, *.....	1,434,468	397,631	18,123,143	...
Hay, tons.....	...	...	...	...
Flour, barrels....	1,377,670	1,855,650	700	601

\*Receipts are given in bush.; shipments in pounds.

## RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month ending October 31, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	1,491,742	437,618	758,202	15,509
Corn, bushels.....	314,348	391,436	441,334	85,434
Oats, bushels.....	1,848,376	1,017,068	626,655	218,078
Barley, bushels....	621,742	548,406	4,655	12,767
Rye, bushels.....	67,288	7,884	44,260	7,888
Grass Seeds, lbs.....	...	...	...	...
Flaxseed, bushels....	...	...	...	...
Hay, tons.....	28,337	15,310	13,783	3,421
Flour, barrels.....	123,695	152,905	212,510	204,730

## RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, Ohio, during the 4 weeks ending November 2, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	476,900	809,300	244,500	1,092,000
Corn, bushels.....	953,600	48,600	969,700	71,100
Oats, bushels.....	152,900	41,400	12,800	167,100
Barley, bushels.....	3,600	...	4,400	4,000
Rye, bushels.....	12,200	5,400	...	15,090
Clover seed, bags....	21,921	21,661	2,299	9,365
Flour, barrels.....	6,634	10,624	102,155	115,405

## RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the 4 weeks ending November 2, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	8,933,265	6,626,451	6,840,450	4,589,510
Corn, bushels.....	...	...	...	...
Oats, bushels.....	208,616	172,347	42,621	16,745
Barley, bushels....	790,608	1,120,778	706,214	775,390
Rye, bushels.....	117,874	18,616	73,731	...
Flaxseed, bushels..	1,889,375	315,668	870,376	288,720
Flour, barrels....	570,845	809,983	936,100	1,290,076
Flour, produced.*	376,760	400,019	...	...

\*Duluth and Superior.

## RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the month ending October 31, as compared with the same period of the preceding year, were, according to Geo. M. Lane, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	354,873	391,853	128,267	345,083
Corn, bushels.....	107,134	92,044	27,716	13,941
Oats, bushels.....	222,602	241,885	19,466	64,246
Barley, bushels.....	95,262	242,585		
Rye, bushels.....	15,028	7,961	9,086	7,146
Hay, tons.....	1,250	1,429		20
Flour, barrels.....	27,500	15,260	11,350	8,258



### DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows that the destination of the wheat exported from the United States was as follows:

Countries.	Month ending Sept. 30.		Nine months ending Sept. 30.	
	1895.	1894.	1895.	1894.
United Kingdom	3,485,926	3,949,903	34,391,525	30,504,553
Germany	58,770	428,532	816,204	2,342,122
France	8,000	266,583	878,534	2,722,755
Other countries in Europe	661,671	1,167,450	8,028,431	12,131,036
Brit. North Am. Possessions	739,294	726,098	3,699,428	3,805,882
Mexico		4	2,734	2,333
Cent. Am. states & Brit. Hond.	10,100	12,933	55,644	65,955
West Indies and Bermuda	27	24	9,195	7,162
Brazil		41	13	90
Other countries S. America	375	650	3,399	2,934
Asia & Oceania	1,396	2,981	23,107	11,712
Africa	48,624		146,946	9,401
Other countries		24	23	24
Total bushels	5,014,183	6,555,223	48,055,183	51,605,952

### DESTINATION OF AMERICAN CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

Countries.	Month ending Sept. 30.		Nine months ending Sept. 30.	
	1895.	1894.	1895.	1894.
United Kingdom	2,750,315	141,607	20,240,765	17,239,569
Germany	883,573	1,444	4,441,712	6,879,363
France	170,430	1,220	789,070	1,558,252
Other countries in Europe	1,128,714	39,478	5,863,530	7,045,046
British North Am. Possessions	491,368	112,009	3,550,394	3,255,015
Mexico	93,901	83,242	223,443	209,903
Cent. Am. States & Brit. Hond's	7,049	7,847	85,232	308,384
Cuba	24,003		175,183	829,718
Puerto Rico			100	15,590
Santo Domingo		716	1,382	3,787
Other West Indies and Bermuda	50,773	40,742	466,638	487,704
South America	13,849	5,446	66,600	99,280
Asia and Oceania	1,551	1,697	7,510	7,836
Other countries		840	2,803	4,557
Total bushels	5,615,526	437,288	35,912,362	37,944,009

### WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 19 weeks ending November 9, for the last three years, according to the *Cincinnati Price Current*, were as follows:

	1895.	1894.	1893
St. Louis	7,438,000	7,713,000	9,532,000
Toledo	3,943,000	11,334,000	8,712,000
Detroit	1,413,000	2,652,000	5,265,000
Kansas City	4,824,000	5,159,000	7,891,000
Cincinnati	497,000	516,000	571,000
Winter	18,115,000	27,374,000	13,971,000
Chicago	11,602,000	18,893,000	12,190,000
Milwaukee	4,531,000	2,912,000	5,501,000
Minneapolis	32,800,000	25,545,000	22,502,000
Duluth	25,910,900	17,835,000	19,011,000
Spring	74,843,000	65,185,000	59,204,000
Total, 19 weeks	92,958,000	92,559,000	91,175,000

### EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending November 9, as compared with same weeks last year, have been as follows:

	For the week ending Nov. 9.		For the week ending Nov. 10.		For the week ending Nov. 2.		For the week ending Nov. 3.	
	1895.	1894.	1895.	1894.	1895.	1894.	1895.	1894.
Wheat, bu.	953,000	660,000	676,000	852,000				
Corn	1,233,000	154,000	1,568,600	81,000				
Oats	88,000	7,000	74,000	16,000				
Rye								
Flour, bbls.	236,000	214,000	304,000	358,000				

### VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Nov. 9, 1895, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bn.	Barley, bn.
Albany		10,000	110,000		10,000
Baltimore	561,000	292,000	224,000	84,000	
Boston	431,000	254,000	7,000		
Buffalo	2,453,000	423,000	91,000	286,000	1,488,000
do afloat					
Chicago	19,854,000	1,201,000	437,000	219,000	82,000
do afloat					
Cincinnati	45,000	5,000	44,000	49,000	129,000
Detroit	444,000	18,000	39,000	11,000	3,000
do afloat					
Duluth	5,386,000		259,000	124,000	743,000
do afloat					
Indianapolis	157,000	44,000	1,000		
Kansas City	1,319,000	5,000	64,000	21,000	
Milwaukee	600,000		15,000	75,000	63,000
do afloat					
Minneapolis	14,179,000		483,000	89,000	178,000
Montreal	269,000	1,000	36,000	3,000	7,000
New York	4,577,000	731,000	1,540,000	25,000	
do afloat					
Oswego	34,000	50,000			110,000
Peoria	101,000	18,000	410,000	4,000	2,000
Philadelphia	191,000	224,000	265,000		
St. Louis	1,219,000	17,000	542,000	17,000	2,000
do afloat					
Toledo	965,000	126,000	238,000	153,000	
do afloat					
Toronto	33,000		11,000		22,000
On Canals	840,000	203,000	82,000		
On Lakes	2,987,000	954,000	344,000		421,000
On Miss. River					591,000
Total	56,936,000	4,627,000	5,289,000	1,160,000	3,840,000
Corresponding date, 1894	81,220,000	2,638,000	9,065,000	449,000	3,993,000

\*Including grain in National elevator, which is not regular under the rules of the Chicago Board of Trade.

### INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of October, 1895, was graded as follows:

WINTER WHEAT.											
Railroad.	White.			Hard.			Red.			No Grade.	
	2	3	4	1	2	3	1	2	3	4	G'de.
C., B. & Q.							4	1	10	29	2
C., R. I. & P.							12		3	16	5
C. & A.							6		1	6	3
Illinois Central							16		3	16	4
Freeport Div.										1	
Galena Div. N. W.										2	
Wis. Div. N. W.									1		
Wabash									21	11	14
C. & E. I.					1				6		
C. M. & St. P.					1	4				1	
Wis. Cent.											
Gr. Western											
A., T. & S. Fe.						5		3	2	21	4
Through & Spec.						2		157	167	5	22
Total each grade	3				4	49	1	178	264	93	51
Total W. wheat	3				53						587

SPRING WHEAT.											
Railroad.	Colorado.		Northern.		2		3		4		No Grade
	2	3	2	3	2	3	2	3	2	3	White.
C., B. & Q.			823	38	357	12			1		1
C., R. I. & P.			87	16	394	51			3		2
C. & A.				2	5	1					
Illinois Central											
Freeport Div.			43	39	350	111			20		
Galena Div. N. W.	2	1	3	275	794	224			3		
Wis. Div. N. W.				32	208	34					
Wabash					1						
C. & E. I.											
C. M. & St. P.			204	118	1967	161			1	1	1
Wis. Cent.				6	13						
C. Gr. Western			64	7	64						
A., T. & S. Fe.					2	6					
Through & Special			262	979	249	3			1		
Total each grade	2	1	1486	1512	4404	603			29	1	4
Total sp. wheat									6,548		5

CORN.											
Railroad.	Yellow.		White.		2		3		4		No Grade.
	2	3	2	3	2	3	2	3	2	3	
C., B. & Q.	1,134	68	86	24	1,177				99	56	10
C., R. I. & P.	307	31	102	12	530				115	5	
C. & A.	463	87	126	34	797				116	70	3
Illinois Cent.	1,320	163	324	33	729				116	70	8
Freeport Div.	85	3	1		48				4	2	1
Gal. Div. N. W.	102	36	18		171				60	23	
Wis. Div. N. W.	3				1						
Wabash	293	80	175	22	426				59	38	
C. & E. I.	139	25	103	9	197				51	71	14
C. M. & St. P.	21	5			38				17		
Wis. Cent.											
C. G. Western	8	1			31				1		
A., T. & S. Fe.	178	31	17	2	269				32	7	
Th'gh & Spcl	415	134	29	14	288				38	39	
Total each grade	4,468	666	981	150	4,702				708	381	36
Total corn											12,092

### OATS.

Railroad.	White.			White Clipped.			No G'de.
	1	2	3	1	2	3	
C., B. & Q.	81	428	81	139		2	10
C., R. I. & P.	215	900	25	224		3	23
C. & A.	10	51	25	105			
Illinois Central	21	153	179	350			4
Freeport Div.	156	364	42	188			3
Galena Div. N. W.	480	1,381	84	293		4	13
Wis. Div. N. W.	9	43		15	1		
Wabash	4	130	88	40			
C. & E. I.	4	45	113	89			
C. M. & St. P.	3	187	874	437		2	10
Wisconsin Central							
C. G. Western	83	188	27	59		7	1
A., T. & S. Fe.	27	165	18	101			1
Through & Special	527	204	53	81	2	31	7
Total each grade	3	1,804	4,927	779	2,121	3	72
Total oats							9,758

### RYE.

Railroad.	1	2	3	No Grade.
C., B. & Q. ....		41	5	2
C., R. I. & P. ....		43	17	1
C. & A. ....		5		
Illinois Central.....		5		
Freeport Div.....		4	2	
Galena Div. N. W.....		35	10	
Wisconsin Div. N. W.....		25	6	
Wabash.....		2		
C. & E. I. ....		5		
C., M. & St. P. ....		45	15	
Wisconsin Central.....		11		
C. G. Western.....		11		
A., T. & S. Fe.....		6	2	
Through & Special.....		24	1	
Total each grade.....		262	58	3
Total rye.....				322



# ELEVATOR

## GRAIN NEWS

An elevator is being built at Brocton, Ill.

An elevator has been erected at Elma, Iowa.

An elevator is to be erected at Standish, Mich.

Another elevator is to be erected at Laurel, Neb.

An elevator is being erected at Netawakaw, Kan.

A new grain buyer is doing business at Cushman, Ill.

A new elevator has been completed at Nekoma, Ill.

Slick & Co. have opened a grain office at Clinton, Ill.

A new elevator has been completed at Stilwell, Kan.

J. A. Smith will build an elevator at Gleuboro, Man.

A new elevator has been erected at Stratford, Iowa.

An oil mill is being erected at St. Anthony's Park, Minn.

Suffern, Hunt & Co. will erect an elevator at Garrett, Ill.

The new elevator at Armstrong, Ill., has been completed.

A new elevator has been completed at Cedar Lake, S. D.

Rohrabough Bros. are building an elevator at Radnor, Ind.

Frank Wood has completed a new elevator at London, Ohio.

An 8,000-bushel elevator is being erected at St. Vincent, Man.

W. H. Taylor has completed a new grain elevator at Wells, Minn.

J. A. Noland is building a large corn crib at Zeandale, Kan.

W. W. Reeves has embarked in the grain business at Philo, Mo.

A cotton and grain exchange is to be established at Bastrop, Texas.

An elevator is to be erected at Breckinridge, Mo., at a cost of \$5,000.

J. F. Holleicke & Co., grain dealers of Wichita, Kan., have sold out.

Al Rodesky of Sand Hill, Ill., is building a granary at Quincy, Ill.

G. S. Brown has the contract for erecting an elevator at Otterbein, Ind.

The National Rice Milling Co. will erect a rice mill at New Orleans, La.

Glasgow & McLean have completed a grain warehouse at Mondovi, Wash.

H. R. Howe is building a large corn crib at Howe, Neb., to store cheap corn.

A plan is on foot to erect a large grain and wool warehouse at Delano, Cal.

The hemp mills at Paxton, Ill., have started up and are running full blast.

The Pickett Rice Milling Co. of Crowley, Ind., has erected a large warehouse.

J. Durkee has about completed his new elevator at Concord Junction, Mass.

T. F. Musson has completed a new 20,000-bushel elevator at Auduben, Iowa.

Harvey L. Steele has embarked in the grain business at San Antonio, Texas.

W. J. Hynes has succeeded Stevens & Carroll, grain dealers of Ragan, Neb.

The new Woodworth elevator at Minneapolis, Minn., is nearing completion.

F. B. Parsons of Hampton, Iowa, is handling corn this year. He trades all kinds of merchandise for it.

Merchants of Wenatchee, Wash., pay a bonus of 40 cents a ton to farmers for grain marketed in their town, to reimburse haulers for ferriage across

the river, and find the investment a profitable one, as a lively business results.

Lee Bros. have bought out Joseph Wyeth, dealer in grain, etc., at Ontario, Cal.

The people of Polo, Mo., want an elevator and say one is needed at that point.

J. W. Ewing of Gibson City, Ill., is buying grain at Webster and Flugstad, Iowa.

The Virden Milling Co. intends to build a 10,000-bushel elevator at Virden, Man.

B. W. Cole, dealer in grain and implements at Mellette, S. D., assigned recently.

An elevator and dump are being put in at the White Loaf Mills at Decatur, Ind.

Arthur Armington's new elevator at Elkhart, Ill., is completed and receiving grain.

Nielander & Co.'s 12,000-bushel elevator at New Albia, Iowa, has been completed.

Lane & Co. have succeeded to the grain business of J. B. Eckerman at Havre, Iowa.

An elevator is wanted at Durand, Mich., and a cash bonus is being raised for one.

F. H. Hancock has started up his elevator at Harlan, Iowa, and is buying grain.

Counselman & Co. are filling their second warehouse at Burdette, Iowa, with oats.

J. J. Eubanks and others are establishing a cotton seed oil plant at Piedmont, Ala.

John Dewey, grain dealer of Buda, Ill., is reported to be doing a good business in corn.

Arrangements have been made for the erection of a new elevator at La Fayette, Ill.

The Wayne Elevator, which was destroyed recently at Oswego, Ill., is being rebuilt.

The Smith-Hippen Company is building cribs at Pekin, Ill., in which to store ear corn.

J. F. McDonald, grain dealer of Gratiot, Wis., has added live stock to his grain business.

W. H. M. Robb has bought the grain business of Walter Jenkins & Son of Murray, Neb.

Christ Ameter has erected a granary and corn cribs at Maud, Ill., and will buy grain.

F. W. Frasier, formerly of Concordia, Kan., has started in the grain business at Topeka.

J. F. Boyd has purchased the grain business of Scudder & Blakemore, Shelbyville, Tenn.

An elevator is being erected in the yards of the Chicago Great Western at Dubuque, Iowa.

A. C. Davis & Co., grain dealers of Topeka, have established a branch office at Dwight, Kan.

W. Sloat has been awarded the contract to erect a large steel elevator at East Toledo, Ohio.

A potato warehouse of about 40,000 bushels' capacity will be erected at Traverse City, Mich.

I. L. Dodge has purchased the grain and hay business of L. H. Yates at Springfield, Mass.

Leonard Hurlbaugh, wheat buyer of Oakland, Ind., is building a large corn crib for storing corn.

E. H. Trexler has succeeded to W. A. Diener's grain and coal business at Mertztown, Mich.

Rathje & Jurz of Frankfort, Ill., have adopted the Pease Dustless Cleaner in their new elevator.

William Marsh, grain dealer of Willow Branch, Ind., is adding a dump to his grain warehouse.

John Straub is building a grain warehouse at Fowler, Ind., and will buy grain at that point.

Forester Bros. have sold their interest in the grain elevator at Raymond, Ill., to Frank Todd.

A. L. Shelton of New Haven, Mo., writes us that he has sold out his grain business at that place.

The St. Anthony & Dakota Elevator Co. is building an 80,000-bushel elevator at St. Vincent, Minn.

Geo. C. Smith of Windsor, Ill., has leased an elevator at Cushman, Ill., where he will buy grain.

Hall & Bird have succeeded to the firm of Bird Commission Co., grain dealers of Kansas City, Mo.

Gilfillan & Rigley is a newly organized grain firm which has engaged in business at Princeton, Ill.

Orrick Martin is putting up corn cribs at Hamilton, Mo., and will store corn for a rise in the market.

McBean Bros., grain dealers of Winnipeg, Man., have dissolved, D. G. McBean continuing the business.

Lilly, Bogardus & Co. of Seattle, Wash., recently bought an Excelsior Combined Grain Machine of the E. H. Pease Manufacturing Co., and report they

are working with it, clipping oats, polishing and grading wheat and cleaning all kinds of grain.

Roach & Roach, dealers in grain, flour, coal, etc., at Clyde, Kan., recently sold out to S. N. Brown.

J. H. Morrill, dealer in grain and lumber at New Lisbon, Wis., is carrying on a prosperous business.

Two portable electric conveyors are to be erected at Tacoma, Wash., to load vessels with wheat and flour.

Bass & Ennis have engaged in the grain business at Tampico, Ill., and are erecting corn cribs at that place.

They say that the farmer's elevator at Broadland, Ill., is doing most of the grain business of that town.

T. E. Malden of Manson, Iowa, has just placed an Excelsior Combined Grain Machine in his elevator.

Nowels & Babcock, grain dealers of Rensselaer, Ind., are putting a Constant Feeder in their elevator.

The Johnstone elevator at Minnedosa, Man., is being overhauled. It is now operated by John Wake.

The Peterson Elevator Co. is building a corn crib at Sutherland, Iowa, which will be 16x21x96 feet in size.

The firm of Hulst & Price has been incorporated at Rapid City, S. D., to deal in grain, coal and lumber.

R. O. Pennewill has sold his elevator at La Hogue, Ill., and has purchased the Holz elevator at Del Rey.

At San Antonio, Texas, the elevators have adopted the A. P. Dickey Manufacturing Co.'s Warehouse Cleaners.

It is said that elevators are much needed at Montrose, S. D., and that several will be built there next year.

A. Wamba of Martinton, Ill., has two of the Constant watertight elevator boots in his elevator at that place.

The B. S. Constant Company has completed a 15,000-bushel elevator for W. S. Sturgeon, at Gilliam, Ill.

A. A. Colgrove, dealer in grain and coal at Faulkton, S. D., has put in a set of wagon scales at his warehouse.

Dickie & Brewster are building an elevator at Baxter Springs, Kan., and will run a feed mill in connection.

C. S. Brewer & Son have organized a company to carry on a grain and livestock business at Stanhope, Iowa.

Nearly all the distilleries at Peoria, Ill., have started up. They will use about 345,000 bushels of corn a week.

Morrison & Grindley, grain dealers of Thomasboro, Ill., have built a large corn crib near their elevator at that place.

K. K. Liquin, grain dealer of Dysart, Iowa, is erecting a large grain warehouse near his elevator at that place.

Van Orsdol & Sons, dealers in grain and coal at Rowley, Iowa, are building another new oathouse at that place.

Allison & Polk have engaged in the grain business at Leonard, Texas, and have established a corn shelling outfit.

The Douglass Grain Co. will build at Minneapolis, Minn., an elevator, warehouse and mill at a cost of \$33,000.

Davidson & Stewart, dealers in grain, feed and flour at Wallaceburgh, Ont., have sold out their retail business.

Austin Stone is having corn cribs erected at Burrton, Kan., and expects to store a large quantity of the cheap corn.

C. H. Chase of Willow Lakes, S. D., has recently equipped his elevator with a Pease Double Flax Reeling Machine.

J. J. Coon of Toledo, Ohio, has placed two of the Pease Universal Feed Grinders in his different country elevators.

Kennett, Hopkins & Co., grain, stock and provision brokers of Chicago, have been succeeded by a firm of the same name.

A. Bishop of Marshall County, Minnesota, has purchased W. C. Saeman's elevator and general store at Plymouth, Wis.

C. F. & G. W. Eddy, grain merchants of Boston, Mass., who failed recently with liabilities of \$250,000, have settled with their creditors at 18 cents



on the dollar, and the business will be continued under the firm name of The C. F. & G. W. Eddy Corporation.

Bass & Ennis have organized and embarked in the grain business at Tampico, Ill., where they are erecting corn cribs.

The case of D. M. Osborn & Co. vs. the Cargill Elevator Co. has been presented to the supreme court of Minnesota.

E. O. Stephenson, Golden City, Mo., has adopted the Dickey Overblast Separator for general cleaning in his elevator.

John Bros., grain dealers of Manilla, Iowa, are preparing to handle corn, and are putting in a shell-er at their elevator.

Andrew Eaton has overhauled his warehouse at Wells, Minn., and has converted it into an elevator run by horse power.

Buell & Morse, grain dealers of Renwick, Iowa, have completed a 20,000-bushel elevator and are now receiving grain.

Matthew Houston's grain store at Knightsville, Maine, was burglarized recently, the safe blown open and \$4 secured.

The Argo Manufacturing Co. will erect a large addition to its starch works at Nebraska City, Neb., doubling the capacity.

W. Sonthall & Sons, grain dealers of Pierson, Iowa, are adding a wheat separator to the equipment of their elevator.

An elevator is being erected at Leavenworth, Kan., which Kemper & Paxton, grain dealers of Kansas City, Mo., will operate.

An addition is being built to Patton Bros' grain warehouse at Santa Rosa, Cal., which will be occupied by Grace Bros.

The Simpson & Robinson Co. has completed a 100,000-bushel elevator for the Star & Crescent Milling Co. of Chicago.

Thomas Brown, Faribault, Minn., has recently equipped with one of the A. P. Dickey Manufacturing Co.'s flax machines.

C. A. Parsons, Boston, Mass., has lately equipped with one of the A. P. Dickey Manufacturing Co.'s largest elevator cleaners.

A new grain and stock exchange has been started at St. Charles, Mo., and "some very important business has been transacted."

The new grain elevator at Pigeon, Mich., is equipped throughout with the E. H. Pease Manufacturing Co.'s machinery.

Alex. Mitchell of Bowesmont, N. D., has bought a Pease Universal Feed Grinder and is operating same by a gasoline engine.

Wilson & Co. is the style of a new grain, stock and provision commission company recently organized at Milwaukee, Wis.

Mino Hodges & Son, dealers in grain, etc., at Blue Creek P. O., Ohio, assigned recently with liabilities of \$2,300 and assets \$1,500.

Thomas Brown, formerly of Montgomery, Minn., is erecting an elevator at Faribault, which will have a capacity of 40,000 bushels.

The B. S. Constant Company writes us that it recently sold one of its grain feeders to William Havenwinker of Hudson, Ill.

The new elevator of S. A. Smith, Austin, Minn., was furnished entirely with machinery bought of the Pease Manufacturing Co.

Knapp & Griswold of Ottawa, Ill., have adopted the Pease Manufacturing Co.'s Warehouse Cleaner in their elevator at Utica, Ill.

The B. S. Constant Company is building a 40,000-bushel elevator for Kirlin & Son, at Centler, Ind. C. A. Drake is superintendent.

L. Olson, Airlie, Minn., has lately equipped his elevator with one of the A. P. Dickey Manufacturing Co.'s Overblast Separators.

Hunt Bros., dealers in grain, hay and straw, at Lynn, Mass., have dissolved partnership, J. H. Hunt continuing the business.

P. Houghton of Whitewater, Wis., writes us that he has sold his interest in the Whitewater Elevator to E. F. Lumb of Eagle, Wis.

The Times of Emporia, Kan., says that the country looks like a new town, scattered all over with new corn cribs, and more going up.

England & Hyuson, grain commission dealers of Baltimore, Md., have dissolved partnership, Charles England continuing the business.

Hallett & Morrison, grain buyers and bankers of Juliaetta, Wash., own and operate a railroad which is 2,600 feet long. It runs to the bluff, 1,226 feet above their grain warehouse, and it is used to trans-

port grain from the top of the bluff to the warehouse, 100 bushels being loaded into a car at once and let down by a wire cable.

Two steel storage tanks of 20,000 bushels' capacity each are to be erected by the Springfield Roller Mill, at Springfield, Minn.

The West Union Milling Company, West Union, Neb., has put in one of the A. P. Dickey Manufacturing Co.'s Dustless Separators.

All the machinery for the Hunting Elevator Co.'s new elevator at Hudson, S. D., was furnished by the E. H. Pease Manufacturing Co.

John Humberstone & Co., grain dealers of Ripley, Ont., have dissolved, J. W. Rapley having bought Mr. Humberstone's interest.

In a recent suit of the Moore Grain and Elevator Co. against the C. R. I. & P. R. R., the plaintiff was awarded nominal damages of 1 cent.

The St. Anthony & Dakota Elevator Co. has completed the erection of a 35,000-bushel annex to its elevator at Devil's Lake, N. D.

C. M. Allen & Son, dealers in grain, hay and implements at Oconee, Ill., assigned recently, with liabilities at \$8,000, and assets at \$5,000.

A. Marlatt & Co. have completed their new elevator at Covington, Ind. It has a capacity of 20,000 bushels and has a full line of machinery.

The Great Northern Elevator Co. is the only elevator company doing business in Superior, Wis., which has not yet opened an office there.

The A. A. Davis Milling Co. has leased the Northern Pacific Elevator at Davenport, Wash., and will carry on a warehouse business.

The Alliance Mercantile Co., New Richmond, Wis., has adopted the A. P. Dickey Manufacturing Co.'s Overblast Separator for general cleaning.

The Interstate Grain Co. of Minneapolis has an elevator at Russell, Minn., where it has paid out over \$20,000 for grain of the new crop.

J. W. Witt, grain dealer of Thornton, Ind., is putting in one of the B. S. Constant Company's water tight elevator boots with feeder attached.

This season there were received at Simon Newman's warehouse at Newman, Cal., 150,000 sacks of grain, against 10,000 sacks last season.

It is reported that the elevators along the line of the Great Northern in the Red River Valley are full of wheat and farmers are loading into cars.

H. W. Anderson & Co., dealers in grain, hay and feed at Baltimore, Md., assigned recently for the benefit of creditors. The assets are \$10,000.

The strong box in the elevator at Ladd, Ill., was blown to pieces by robbers recently and the entire contents stolen, the robbers securing one cent.

The Farmers' and Merchants' Cotton Oil Co. has a plant about completed at Greenville, Texas, which will have a daily capacity of 150 tons.

The Hunting Elevator Co.'s new elevator at Wesley, Iowa, is furnished with machinery outfit complete from the Pease Manufacturing Co.

The Gregg Bros. Grain Co. of St. Joseph, Mo., has closed its elevator at Alexandria, Belvedere and Coulton, in Nebraska, on account of crop failures.

George Scovil has purchased the grain damaged in the burning of the Allison & Metzgar elevator at Pana, Ill., and is selling it at 10 cents per bushel.

The B. S. Constant Co. recently sold E. G. Kitzmiller of Flora, Ind., a Constant Feeder. Also one was recently sold to E. W. Phares of Tipton, Ind.

The Marfield Elevator Co. has placed one of the E. H. Pease Manufacturing Co.'s Hercules Power Car Pullers in its cleaning elevator at Utica, Minn.

J. L. Snyder & Co. of East Lynn, Ill., furnished their new elevator throughout with machinery bought from the E. H. Pease Manufacturing Co.

Torkel Torkelson, grain dealer of Austin, Iowa, has sold his farm in Norway Township, South Dakota, and will devote himself to his grain business.

Johnson, Lane & Co., grain dealers of Lawn Hill, Iowa, have built an annex to their elevator which gives them an additional capacity of 13,000 bushels.

McClure & Block, Winchester, Ill., have thoroughly overhauled their elevator and put in new machinery bought of the Pease Manufacturing Co.

The Simpson & Robinson Co. has just completed a 1,250,000-bushel barley storage elevator at South Chicago, Ill., for the Chicago O'Neill Grain Co.

Andrews Bros., grain dealers of Rossville, Ill., defaulted recently, leaving many creditors behind. Their elevator was taken possession of by D. Watson, one of the heaviest creditors, and was sold

to H. Lineberger & Son of Chicago for \$6,500. Mr. Lineberger will at once remove to Rossville, where he will engage in the grain business.

P. H. Graves, grain dealer of Seneca, Ill., who failed recently, has been indicted by the grand jury on the charge of stealing \$876 from H. H. Hogin-son.

Of the wheat damaged in the burning of the Daisy Mill Elevator at Superior, Wis., 70,000 bushels were saved, but 30,000 bushels went to the bottom of the bay.

Berryman & Walton, grain and stock dealers of Scales Mound, Ill., have bought the Hoch grain warehouse and will look for an increase in business.

Andrews & Gage, Minneapolis, Minn., have adopted the Dickey Overblast Separator for grain and flax in their houses at Mapleton and Murray, N. D.

James Dawson has succeeded to Milan Townsend's grain and milling business at Lebanon, N. H., and will overhaul the plant and make additions.

Phillips & Richardson, grain dealers of Portage la Prairie, Man., have constructed a flat warehouse at Grand Coulee, where they will have a wheat buyer.

The Empire Grain Co. has been incorporated at Chicago, Ill., with a capital stock of \$25,000, by Joseph K. Davidson, Wm. J. Pope and Augustus I. Lewis.

The Consolidated Elevator Co. of Duluth, Minn., intends to make repairs to the engine house between elevators "G" and "F" which will cost \$4,200.

Cropsey, Ill., is said to be one of the best grain points in McLean County. There are three elevators there, which have a total capacity of 100,000 bushels.

P. J. Fransioli & Co., grain merchants of Tacoma, Wash., have opened a branch office at Seattle, which they have put under the management of C. E. Downie.

Clark Bros. & Co. of Manson, Iowa, are going to increase their profits this season by putting in a French bnrr feed mill at their elevator and grinding feed.

It is reported that there will be a new grain firm organized at Carlock, Ill., and an elevator erected as soon as permission can be obtained from the railroad.

Paul McCormack of Junction, Yellowstone Co., Mont., has shipped 3,500,000 pounds of oats to Fort Yellowstone in the National Park, on a government contract.

The Torpin Grain Co. of Oakdale, Neb., has adopted and placed one of the E. H. Pease Manufacturing Co.'s Wells Warehouse Cleaners in its elevator.

A new elevator has been erected at Port Stanley, Ont., which will be operated by W. H. Farr, who will buy wheat for John Campbell, miller of St. Thomas.

The Todds & Stanley Mill Furnishing Co. has been awarded the contract for building the second addition to the Farmers' Elevator Co.'s plant at St. Louis, Mo.

John Cartwright, grain dealer at Davidson, Mich., intends to do a good business this year, and among other improvements he has put in a feed mill at his elevator.

Griggs Bros. of St. Paul, Minn., recently purchased one of the Pease Manufacturing Co.'s warehouse cleaners for cleaning grain, clover, timothy and flax.

M. H. Mitchell of Bonham, Texas, writes us that G. L. White, proprietor of the Bonham City Mills, will erect a 20,000 to 30,000 bushel elevator for wheat storage.

Elevator men at Hudson, Ill., complain that cars are too scarce, and that they are getting tired of having to scrap or run a footrace every time a car comes in sight.

Robert Unzicker has succeeded to the grain, flour and feed business of W. E. Rich at Peru, Ill., and has bought the lease of the Bowers elevator. Mr. Rich will engage in the same business elsewhere.

The Garfield Elevator & Storage Co. is doing a good business in cleaning grain. One day recently 86 sacks of grain were cleaned, producing 8,700 pounds of marketable wheat and 2,105 pounds of barley.

It was recently reported at Milwaukee that the Angus Smith elevators would not be leased to the Wisconsin Grain and Elevator Co., that company failing to ratify the agreements of the lease, and now Mr. Smith refuses to sign the papers. There-



fore the elevators which were to have been managed by the new company will revert to Mr. Smith unless he comes to some other decision.

Wood & Topliffs have this season rebuilt and greatly enlarged their elevator at Gibson City, Ill., and bought all machinery for same of the Pease Manufacturing Co.

A glucose factory to cost \$1,000,000 is to be established at Sioux City, Iowa, where the business men offered a bonus of \$75,000. It will use 15,000 bushels of corn per day.

The Simpson & Robinson Co. has completed a transfer elevator at Valparaiso, Ind., for the Grand Trunk Railroad. It has a storage capacity of 100,000 bushels.

Martin D. Stevers & Co., Chicago, Ill., have equipped their house at Denison, Iowa, with one of the A. P. Dickey Manufacturing Co.'s Overblasts for general cleaning.

The E. H. Pease Manufacturing Co. is filling an order from Mexico for 12 Racine Corn Shellers of various sizes, ranging in capacities from 40 to 350 bushels per hour.

E. W. Wright and Frank L. Gray have formed a partnership and have engaged in the grain business at Lyons, Kan., operating the Missouri Pacific elevator at that place.

Joseph Anderson is building an elevator at Breckenridge, Mo., which will cost \$5,000, the contract being let to Frank Kaucher. C. A. Deaderick will probably have charge.

John W. Hundley, formerly of Louisville, Ky., has been appointed grain buyer for the E. B. White Commission Co. of St. Louis, Mo., throughout Iowa, Kansas and Nebraska.

The contract for the erection of the Daisy Mill elevator at Superior, Wis., was let to the Barnett-Reed Co., and the work will be completed in the latter part of January.

J. L. Pumphrey is contemplating rebuilding his elevator at Heyworth, Ill., which was burned recently. He has erected a temporary grain office and is carrying on business.

Hall, Meachum & Co.'s new elevator at Plainview, Minn., is furnished throughout with machinery, motive power and cleaners of the E. H. Pease Manufacturing Co.

A. F. Martin of Winnipeg, Man., is organizing a company to build elevators in the French settlements in the Red River Valley, and establishing a flour mill at a central point.

The Des Moines (Iowa) Elevator Co. is contemplating the rebuilding of its plant which was burned October 24. It expects to erect an elevator of 200,000 bushels' capacity.

The Adams Grain and Elevator Co. has been organized at Kendrick, Wash., by W. S. and J. F. Adams. The company has a large warehouse equipped with cleaners, etc.

E. H. Husted & Co. have let the contract for the erection of a transfer elevator at Buffalo, N. Y., which will be 105x56x112 feet in size. It will be completed as soon as possible.

C. P. Anderson and J. F. Hutchinson have entered into partnership and have rented a 5,000-bushel corn crib at Parnell, Mo., built by the Chicago Great Western Railroad.

A stock company is being formed by John Fern, Thomas Hanan and others to erect an elevator at Kankakee, Ill. It will cost \$50,000, and will be built this fall or in the spring.

Thomas Page's new elevator at Topeka, Kan., which will be opened in connection with the Page mill, will soon be completed. The structure will be frame with brick veneering.

Hope Bros. of Parsons, Kan., do an extensive business handling corn. Last year they shelled in transit over 600 cars, and are this season preparing to buy and crib 100,000 bushels.

Fred Schwartz, formerly in the grain business at Kansas City, Mo., but for some years past in business at Omaha, Neb., has again engaged in the grain business at Kansas City.

R. T. Harrington's new elevator recently built at Marseilles, Ill., is equipped with gasoline engine and other machinery bought of the E. H. Pease Manufacturing Co., including the Pease Warehouse Cleaner.

The proceedings which were begun against the Belt Line Elevator Co. of Superior, Wis., to enforce the provisions of the warehouse law have been suspended upon that company opening an office in Superior.

J. F. Payne, the Indianapolis representative of the Barnard & Leas Manufacturing Co., reports the following among recent sales in Indiana: To Simon Nading of Hope, a new and complete elevator outfit; Hiram Hyatt of Washington, a full line of ma-

chinery for his new elevator at Wheatland; a complete elevator outfit for M. P. Burt of Morristown, and a complete outfit for C. E. Short of Hillsboro, Ind.

The new elevator of Skene & Fish at Ventura, Iowa, is furnished throughout with motive power, cleaners and all other machinery bought of the E. H. Pease Manufacturing Co.

Bender Bros' new elevator at Wesley, Iowa, is furnished from top to bottom with machinery bought of the E. H. Pease Manufacturing Co., as is their new elevator at Fostoria, Iowa.

Martin D. Stevers & Co. of Chicago write us that they have sold their elevator at Manning, Iowa, to A. T. Bennett of Manning, and their elevator at Irwin to H. H. Rice of Chicago.

Kerlin & Ryan of Cutler, Ind., have ordered three Constant Feeders and two dumps, this being the third elevator Mr. Kerlin has equipped with the Constant machinery this season.

At the end of October the wheat at Fort William, Man., amounted to more than 2,000,000 bushels, with shipments about 720,000 bushels, and receipts nearly a million bushels a week.

The P. B. Mann Co., grain commission dealers of Minneapolis, Minn., intend to build an elevator at that place, and have petitioned the city council for permission to construct sidetracks.

Wm. M. Galt & Co., grain commission dealers of Washington, D. C., have purchased Walter Hewitt's large grain warehouse, which gives them additional railroad facilities and storage room.

Thiesen & Schlosser have formed a company and engaged in the grain business at Howard, S. D., where they have purchased the Kendall Elevator. E. W. Jones will buy grain for them.

According to all reports more elevators are needed in some parts of the Northwest. In the southern part of South Dakota it is said that the farmers are unable to get storage for their wheat.

The Cameron Elevator Co. has been incorporated at Cameron, Ill., with a capital stock of \$1,500, to handle grain. The incorporators are C. A. Mills, W. C. Whitman and A. E. Kelly.

The last elevator remaining at Waterloo, Iowa, is being remodeled, and will be used for other purposes. It is said that feeding has largely taken the place of shipping grain at that place.

The National Cotton Seed Oil Co.'s mill at Galveston, Texas, has suspended operations, which action was rendered necessary by the high rates charged by the Houston-Galveston railroad.

It is said that lumber companies are making large shipments of lumber to Minnesota, where farmers are extensively building granaries to hold their wheat until they can get a higher price for it.

Henry Hulett and Scott Darter will soon open a grain buying establishment at a new station to be established on the Midland road at the crossing of the Greencastle Pike, near Crawfordville, Ind.

F. J. Wood, dealer in grain, seeds and wool at London, Ohio, writes us that he has completed a new elevator at that place. It is located on the Pennsylvania Railway and is now in operation.

The Central Elevator Co. and the Pacific Elevator Co. will rebuild their elevators at Madison, Minn., which were destroyed by fire recently. The Madison Warehouse Co. will build a flat warehouse.

S. S. Daish & Son of Washington, D. C., recently placed one of the E. H. Pease Co.'s Excelsior Combined Grain Machines in their elevator for clipping oats and for general cleaning of grain.

It is reported that the Chicago, Rock Island & Pacific Railroad Co. is contemplating the erection of large elevators or corn cribs at stations in Iowa and Missouri, for storing large quantities of corn.

Frazer & Donald have just completed a 30,000-bushel steam elevator at Pilot Mound, Man. It is a most complete house and is provided with two weighing hoppers and a complete line of machinery.

The new elevators built by McMichael & Son at Boyden and at Hull, Iowa, and also those recently built by the Hunting Elevator Co. and Bender Bros. at Hull, are all equipped with machinery outfits bought of the E. H. Pease Manufacturing Co.

William Wyckle and C. H. Rumley of Danforth, Ill., have formed a partnership and engaged in the grain business at Buckley, Ill., having succeeded to the grain business of Leffler & Wolf of that place. They will operate the W. L. R. Johnson elevator.

About the middle of October United Elevator Co. bonds fell as low as \$11.50, but toward the end of the month two more elevators were opened, one in St. Louis and one in East St. Louis, and prospects brightened. On November 6 the company's note to the Mississippi Valley Trust Co. fell due, but mat-

ters were not pushed and the mortgage was not foreclosed. The United Elevator Co.'s new bonds in \$485,000 have not yet all been floated, but President Anderson feels confident that they will be taken up.

W. H. Small & Co., grain and flour dealers of Evansville, Ind., have purchased the 30,000 bushels of wheat damaged in the burning of Witherspoon & Barr's elevator at Princeton, Ind., and will clean and sell it.

The Canadian Linseed Oil Mill Co. will have its mill at Mission City, B. C., in operation next January, and will enter into contract for the product of 3,000 to 5,000 acres, for which it offers 80 cents per bushel.

The Buffalo Lake Industrial Union and Elevator and Mercantile Co. has been incorporated at St. Paul, Minn., with a capital stock of \$25,000, with the object of storing, buying and selling wheat and other cereals.

Bartlett, Kuhn & Co. of Terre Haute, Ind., are erecting five corn bins at Vincennes, Ind., where they intend to erect an elevator shortly. They want to buy all the corn possible to keep for the spring market.

Percy R. Hyuson, formerly of the firm of English & Hynson of Baltimore, is now representing the Baltimore firm of Parr & Johnson at Columbus, Ohio, and is doing a general brokerage business in grain, hay, etc.

The new elevator of Edmonds & Shade at Kingsley, Iowa, is equipped with machinery bought of the E. H. Pease Manufacturing Co., and has in it one of the latest improved Excelsior Combined Grain Machines.

Last year the Exchange Elevator Co. of Buffalo, N. Y., handled 4,000,000 bushels of grain. At its elevator five cars can be loaded at once, 100 in a day, and there is an elevating capacity of 10,000 bushels per hour.

White & Baum's elevator at Linden, Ind., was entered by burglars recently, who broke open the safe and secured \$15.15 in money, and \$3,000 in notes. Bloodhounds were put on their tracks, but they were not caught.

C. R. Clark, who has for some years carried on a receiving business in grain at Chicago, has formed a partnership with H. Higgins, also a grain receiver of long standing, and they are now doing business together.

Hollis M. Chase, head clerk in F. F. Powell's grain store at Newport, N. H., has been arrested on the charge of appropriating \$2,000 of his employer's money. It is alleged his stealings had been carried on for some years.

The two elevators at Ortonville, Minn., one belonging to Geier Bros., and one to J. C. Sanborn & Son, are shut down half the time because they cannot get cars. The agent doles out to each two cars every other day.

The Simpson & Robinson Co. has completed a 200,000-bushel cleaning elevator at Minneapolis, Minn., for E. S. Woodworth & Co. It is equipped with latest machinery, including a Monitor Cleaner and a Monitor Oat Clipper.

Jno. Hammer of Utica, Minn., recently placed one of the E. H. Pease Manufacturing Co.'s Pease Universal Feed Grinders in his elevator. He also has one of their Excelsior Dustless Separators for cleaning wheat and flax.

The Michigan Central Railroad is about to erect a transfer elevator at One Hundred and First street, Chicago, which will have a transferring capacity of 150 cars of grain per day. It is said Chase Bros. have the contract.

Sheffield & Co. of Faribault, Minn., lost their flour mill by fire recently and have decided to discontinue their milling business for the present. They will continue in the grain business and are thinking of moving to Minneapolis.

O'Connor Bros., dealers in grain, etc., at Washburn, Raymond and Jesup, Iowa, intend to establish a branch office at Burdette, where they have purchased the Farmers' elevator, which will be under the charge of J. J. O'Connor.

Farrum, Reardon & Co., the grain commission company of Boston, Mass., which failed a short time ago, has offered to settle with creditors at 25 cents on the dollar, but the offer was refused. The nominal assets of the firm are said to be \$20,000, the actual assets about \$15,000, and the liabilities \$60,000.

The feat performed at Superior, Wis., of raising one of the Globe elevators from its foundations and letting it down on a new foundation six inches higher than the old one, is somewhat unusual. The work was done by means of 48 five-ton jackscrews, and has taken since last summer. The Globe company has, in addition to the new foundation, put in a complete system of machinery for the cleaning



of smntty wheat and a new boiler house has been built outside of the building proper. The improvements in all have cost over \$10,000.

The Minneapolis & Northern Elevator Annex No. 2 at Bathgate, N. D., recently settled so much that some of the outside boarding of the basement was forced off. It settled about the same on all sides, so that not much damage was done.

C. W. Bigham has rented the coarse grain elevator of J. R. Hoover & Son at Otisco, Minn., and will operate it in connection with his elevator. It will not be operated for Everett, Anghenbaugh & Co., for whom Mr. Bigham is grain buyer.

Nearsighted merchants of New Paynesville, Minn., have organized and intend to put out an independent wheat buyer "to buck the elevators and make the town grow." The grain buyers can open the merchants' eyes by starting a general store and selling at cost.

It is said that a great many of the old established receiving firms of Chicago are this year taking an active part in the cribbing and handling of corn in the country. Pope & Lewis have recently organized the Empire Grain Co. and will handle corn in Kansas.

The Kansas City Star says that everyone who can raise enough money to build a crib is in the market to buy corn in Harper County, Kansas. It is so in many other parts of the country, and crib builders should reap a harvest only equaled by the corn crop this year.

Haworth & Spang, grain dealers and elevator men of Georgetown, Ill., are giving a thorough overhauling to their elevator, placing new foundations, building new bins and adding machinery. A corn sheller and separator will be added with a capacity of 700 bushels per hour.

It is said that the action of the Lake Shore road in building a transfer elevator at Buffalo, N. Y., is an initiative that other roads will be compelled to follow if they do not want to lose business. One other road is preparing to erect a transfer house and others may soon follow.

A difficulty recently arose between F. M. Chapman and Wykle & Rnnley at Watseka, Ill., over a question of elevator rentals due. Mr. Chapman claiming \$1,200. It was agreed to arbitrate the matter, and a committee of grain men decided that Mr. Chapman should receive \$300.

Alfred F. Avery, who absconded recently with \$7,000 from the firm of Messmore, Gannett & Co., grain commission merchants of St. Louis, Mo., has been arrested and will be prosecuted. Only \$20 of the stolen money was recovered, and the rest went to bucket shops and race tracks.

The Stevens-Campbell Co. has been incorporated with a capital stock of \$450,000 to carry on the business of N. H. Stevens, John Campbell, James Rutherford and H. J. Stevens at St. Thomas, Chatham, Alymer & Blenheim, Ontario, dealing in grain, seeds, meal, flour, farm products, salt and coal.

J. N. Heater, of Kansas City, general Western agent for the S. Howes Co., recently sold full lines of the Eureka cleaning machinery to the Lexington Mill and Elevator Co., at Lexington, Neb., which is improving its grain storage and milling plants, and to R. T. Mead's new flouring mill at Pattonsburg, Mo.

Z. O. Smith, who retired from the grain firm of Christopher & Smith of Kansas City, about a year ago, and went to California for his health, has again started in the grain business at Kansas City. Mr. Smith is a pioneer in the grain trade of Kansas City, having started in the grain and milling business there in 1869.

The Commercial Club of Mobile, Ala., worked hard some months ago to raise a bonus for the erection of an elevator at that city. They started out to raise \$15,000 and raised \$12,000, where the matter rested. But now an unknown party offers to erect a 250,000-bushel elevator if a bonus of \$15,000 is raised before Jan. 1, 1896. An effort will be made to raise the \$3,000 needed.

Watkins & Co., grain dealers of Sheldon, Ill., have completed their new transfer elevator at that point. It has transferring capacity of 125 carloads per day, and a storage capacity of 100,000 bushels. It will do all the transferring of the Big Four road besides other business, and it is expected that more than 12,000,000 bushels of grain will pass through it before another crop. The elevator was erected by the Seckner Contracting Co.

The Kendrick Grain Co. of Kendrick, Wash., has completed a chnte and large warehouse for the handling of grain. Grain is delivered in a warehouse on top of a bluff 1,220 feet above the lower house and is shot into a large bin with spouts below, where it is sacked and piled into the warehouse on the railroad track. This saves about four miles of hauling down a steep grade and getting back again. The conveyor is a four inch galvanized iron

pipe. About 75,000 bushels of wheat and 5,000 bushels of flax will be conveyed down this spout this year.

J. C. Laurence is agent for the Farmers' Warehouse Co. at Garfield, Wash., and got 80 per cent. of the wheat this season, they say. He recently built a large addition to the warehouse and had it full before the roof was on, besides 100 cars on track.

Work on the five elevators under construction at St. Louis, Mo., is being pushed as rapidly as possible. The addition to the Farmers' Elevator is about completed, and a second addition will soon be under way. The Burlington elevator, which will have a capacity of 1,750,000 bushels, is only just above the foundation, but it is expected to be completed and in operation by January 1.

Clark Bros. of Manson, Iowa, have one of the Excelsior Combined Grain Machines with which they are having such success separating the mustard seed out of oats that 72,000 bushels shipped by them in October sold one grade higher than could have been sold otherwise, and they realized handsomely from the mustard seed which the machine removed. From one car of 58,000 pounds of mustard seed they realized 62½ cents per hundredweight on track at Chicago.

Geo. M. Randall, agent at Kansas City of the Barnard & Leas Manufacturing Co., was recently awarded the contract to place a large corn shelling plant in the Santa Fe elevator at Winfield, Kan. The plant will consist of a corn sheller and cleaner with a capacity of 1,000 bushels per hour, large elevator, ear corn drag and necessary connections which will be operated by friction clutch and manilla rope transmission. Davidson & Smith, grain commission merchants of Kansas City, recently took possession of the elevator.

## Latest Decisions.

### Feeding; Disposing of Mortgaged Grain.

Judge Jones, sitting in a wheat case at Canton, S. D., recently ruled that the feeding of grain covered by a chattel mortgage is not disposing of mortgaged property, and threw such a case out of court. Holders of chattel mortgages on grain are, by his decision, completely at the mercy of the mortgagee, and if the mortgaged grain is fed to stock they have no recourse.

### Jury Decides Agent not Responsible.

In the case of Gottlieb Fink vs. Chas. W. Bailey, tried in the circuit court, the jury found for the defendant. This was a case in which it was sought to hold Bailey responsible as a member of the grain firm of Trickle & Martin, for whom he was purchasing grain as their agent at Thomasboro, on the ground that he received a percentage of the profits for his services.—Champaign, Ill., Times.

### Liability for Error in Transmitting Message.

The Court of Appeals met at Kansas City, Mo. November 4 and handed down one decision for a judgment of 65 cents, which was a very expensive one, considering that it had cost \$25 to procure it. This was the case of M. W. Jarboe against the Western Union Telegraph Company, in which the plaintiff was engaged in manufacturing flour at Carrollton, Mo. He sent a telegram to a customer at Augusta, Ga., quoting the price of a low grade brand of flour at \$1.75 per barrel. The message had it \$1.25 per barrel, the offer was accepted and he was compelled to fill the order, losing \$91 on the flour and 65 cents paid for sending the telegram. The lower court gave judgment for damages, but the Court of Appeals reversed that decision and remanded the case, rendering in favor of merely the amount paid for the telegram, 65 cents.

### Liability of Bailee for Grain Burned.

Another case involving corn lost by the elevator fire which occurred four years ago last June was tried at Cambridge, Ill., the last week of October, and decided by a jury in favor of the plaintiff, James Gilbraith. The case was James Gilbraith against Mussey Bros. for ear corn stored with them and burned up without insurance. The decision seems to have been based on a Supreme Court ruling that where grain is stored and burned up, if the full amount so received is not in store the warehouseman is responsible for the whole. In this case the jury figured from the evidence that Mussey Bros' cribs contained a few bushels less than they had issued receipts for. As a matter of fact, the Gilbraith corn for his convenience in unloading was dumped, run through a sheller and placed in bins. The evidence as to the amount of corn in the cribs was very conflicting. The amount involved in this case is 1,200

bushels at 50 cents per bushel. There are two more cases similar to this yet to be tried. The case of Gareth vs. Mussey was tried a year or two ago and decided in favor of the Musseys.

### Stored Wheat; Receiver.

Judge Thomas has decided the case of Farmers vs. the North Dakota Milling Association, in favor of the former. When the Milling Association went into the hands of a receiver, it owed farmers \$66,000, of which \$40,000 was owed to North Dakota farmers. By his decision the farmers will get their pay if there is enough wheat in the elevators on which they hold tickets, if not they will be paid pro rata. The farmers will, however, be compelled to pay storage on their wheat.

### Destruction of Elevator on Leased Ground.

The eight companies interested in the loss of the Simpson-McIntire warehouse in Monticello, Iowa, have practically decided to carry the case, recently decided in the United States Court of Appeals in St. Paul, to the Supreme Court of the United States. A meeting of managers of the companies was held in Chicago recently to discuss this matter, and it was decided to call on other companies to become interested in and make a test case of this suit. The Simpson-McIntire Company occupied a warehouse built on the right of way of the Chicago, Milwaukee & St. Paul in Monticello, Iowa. This was burned Nov. 11, 1892. The companies interested, the Hartford, Niagara, Springfield, Fire Association, North British, Hanover, Citizens' of New York, and the Duquesne Fire and Marine, paid \$23,450 insurance on the property to the owners. Suit was brought against the railroad for the recovery of this amount on the ground the fire was caused by sparks from a passing engine. The railroad company entered a demurrer to the suit on the ground that when it leased the property on which the warehouse was built there had been a stipulation in the contract to the effect that the company should not be held responsible for damages by fire or otherwise. The insurance companies held that such a contract was contrary to public interests, and was therefore void. After going through the Supreme Court of Iowa it was taken to the United States Court of Appeals in St. Paul, which rendered a decision early in the present month sustaining the demurrer of the railroad company. The matter is considered one of vital importance to railroad companies, and if enough interest is shown in the case to warrant it will be carried to the Supreme Court for a final decision. Should the decision be in favor of the insurance companies they would still have to go in court and show that the fire in Monticello was the result of the negligence of the railroad company.

### Error in Transmitting Order to Buy.

A case of interest to commission men and brokers was on trial recently before a jury in Judge Baker's court, at Chicago. It was William E. Webbe & Co., grain brokers, against the Western Union Telegraph Company, for damages alleged to have been caused by a mistake in a message transmitted by defendant.

The plaintiff firm had as a customer the firm of J. H. & J. C. Haas, in Montgomery, Ala. Jan. 16, 1893, the latter sent a message to Webbe & Co. in cipher ordering the brokers to buy for them 5,000 bushels of May wheat. The message read: "Buy five May." and the operator by mistake wrote: "Buy fifty May." Webbe & Co. understood this to mean that the Alabama customer wanted 50,000 bushels of May wheat. They acted on the order and bought the wheat, but immediately after that the market fell and the 50,000 bushels were sold out at a loss of \$1,000.

The company refused to pay the damages claimed by plaintiff, on the ground that Webbe, as soon as he made the purchase of 50,000 bushels, telegraphed to his customers in Alabama. There was time, the company claims, when this telegram was received by the Haas's, to dispose of the wheat without any loss. The defendant claims it should not be held liable for the negligence of the Alabama people.

Judge Baker, on motion of the attorneys for the telegraph company, directed the jury to return a verdict for the company. This was done on the ground that one of the conditions on the back of the telegraph blank which is used by the public is that in case of any mistake or loss, a claim must be presented to the company within sixty days. The evidence showed that within sixty days after the telegram was sent, W. E. Webbe did present a claim to the company for damages on account of the mistake, but it was presented in the name of Haas. The company refused to pay the claim, and Webbe then presented a claim in his own name, but more than sixty days after the sending of the telegram. The plaintiff will take an appeal.

W. C. Erwin & Son of Chicago brought in a carload of oats recently which weighed 69,900 pounds, believed to be the largest carload of oats ever received in Chicago.



## CROP : CONDITIONS.

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

**KANSAS.** Gardner, Johnson Co., Nov. 13.—We have an enormous crop of corn and oats. The acreage of wheat was small. J. B. WARD.

**PENNSYLVANIA.** North Wales, Montgomery Co., Nov. 5.—We have had a very dry fall, and farmers have only just finished seeding their fall grain. Crops have been good with a fair yield. ISAAC WAMPOLE JR.

**ILLINOIS.** Virden, Macoupin Co., Nov. 9.—The acreage of winter wheat sown is 80 to 85 per cent. of the sowing of 1894. There is no wheat in store, and not over 16 to 20 per cent. of the 1895 crop in farmers' hands. J. N. HAIRGROVE.

**NEBRASKA.** Powell, Jefferson Co., Oct. 19.—There are no crops at all in this vicinity this year, and there were none last year. Elevator men in this section will need a pension to be able to get over the hard times. V. E. CHAMBERLIN.

**OHIO.** Ashland, Ashland Co., Nov. 11.—The acreage of wheat this fall is about average. Its condition was about 70 per cent. up to the late rains; I think it will improve now. Stocks in elevators are very small, and there is about 30 per cent. of a full crop in farmers' hands. B. H. PALMER.

**INDIANA.** Brazil, Clay Co.—The flies are working on the early sown wheat, depositing their eggs in abundance. It looks very spotted. Not much of the late sown wheat is above ground. Corn is a big crop, but the quality is not as good as expected, as chinch bugs did considerable damage. N. A. T.

**VIRGINIA.** Lynchburg, Campbell Co., Nov. 9.—The corn and oats crops in this section are fair, but were damaged to some extent by dry weather. Wheat seeding is over and the corn and tobacco sown are up and doing well. There may not have been a full average crop sown as the land has been too dry to do much fallowing. S. S. FRAZIER.

**KANSAS.** Ft. Scott, Bourbon Co., Nov. 9.—Exporters and railroad men have sold the farmers' corn too cheap. Export sales based on 16 cents to the farmer in Kansas and Missouri will prove to be a mistake. Farmers are not selling their corn at 17 cents. Bankers, speculators, merchants, and stock feeders are all buying corn, and as yet the shipper has not been able to get any. DAVIS & CO.

**MICHIGAN.**—The Michigan crop report for November, issued from the state department, gives average condition of wheat November 1 at 78 per cent., condition in Southern counties, where most of wheat is raised, being as low as 72 per cent. Whole condition is 10 per cent. lower than a year ago. Drouth of year which is now being relieved by generous rainfall was worst ever experienced in state, total rainfall from May to October inclusive being only two-thirds of normal. Corn estimated to yield 61 bushels per acre.

**RICE.**—The rice crop has now been coming in nearly three months, and it is becoming possible to secure something like definite information as to the yield. The river crop is, in fact, practically all in, that is to say the great bulk of it, and it must be admitted that the crop in that section was a disappointment, the yield per acre, as well as the quality of the rice, being defective. With respect to the crop of the Calcasieu section, which is now arriving freely, the yield is also turning out smaller than was expected at the commencement of the season, and the grain is not as heavy as usual, owing to the long dry spell and the hot September weather. It is, therefore, not at all likely that the crop will reach the large figures considered probable some time back. During the summer a yield of two million bags seemed indicated, and, later, that estimate was reduced to a million and a half. Even that figure must now be shaded, although to what extent is, of course, impossible to say.—New Orleans Picayune.

**GOVERNMENT CROP REPORT.**—The November returns to the Department of Agriculture make the corn crop the largest in volume on record, with the rate of yield, however, somewhat less than that indicated by the returns for October, being 26.2 bushels per acre. This must be regarded as preliminary and not a final estimate of the yield. The whole Missouri basin reports a great falling off from earlier estimates; the extreme dry weather has converted fair promise into a comparative failure in Nebraska and adjoining states, while considerable damage is ascribed to untimely frosts near the Rocky Mountains and along the northern border. There are many reports of chinch bugs and army worm, while the rotting of ears by soaking summer rains has made a large part of the crop unmerchantable in some interior states. The average yield of buckwheat is 20.1 bushels, against 16.1

last year. The average yield of potatoes is 100.7 bushels per acre; tobacco 743 pounds, and hay 1.06 tons. The crop of apples is reported as 71.1 per cent. of a full crop.

**OHIO.** Antwerp, Paulding Co., Nov. 9.—The acreage of wheat in this district is somewhat larger than one year ago, but the condition is 50 per cent. below last year's. Drouth is the cause. We have had no rains since seeding commenced. In many fields the wheat is not up, and in others where it is up it is spotted and is dying. Rain began to fall on November 7, and with warm weather wheat will grow. But with everything in its favor from now on it will go into the winter in very poor condition. About one-third of last year's crop is in farmers' hands. The corn crop was excellent. It is too dry to husk it out, and a large amount will go over the winter in the fields. Its condition was excellent and the average large. ELY & BISSELL.

**OHIO.**—The official report of the board of agriculture of the condition of crops November 1 says: The area of winter wheat sown this fall for the harvest of next year is about the same as that sown last fall, being one per cent. less. The present condition of the plant is very low, being but 55 per cent. of a fair average. The condition of the soil at the time of seeding was bad in fourteen counties. General drouth following wheat seeding is the cause of the present condition. Many fields are reported as not up and much that is up seems to be making little or no growth and is weak and thin on the ground. Many fields are brown and spotted. These conditions seem to be quite general, percentage estimates ranging from 33 to 90 per cent., well tilled lands showing the higher estimates.

Potatoes.—The average product per acre, while showing an increase over the very short product for the years 1893 and 1894, is still below the average for the state.

The crop of clover seed is short and very unevenly distributed over the state, ranging from 25 per cent. and upward of a fair crop.

The condition of leading crops is as follows: Wheat.—Area sown last fall 2,278,431 acres; wheat sown this fall, compared with last year, 99 per cent.; wheat, total estimated area sown for harvest of '96, 2,251,043 acres; wheat condition, compared with an average, 55 per cent.; wheat, average date of seeding, September 23. Rye.—Area sown this fall, 38,430 acres; area sown this fall compared with last year's, 97 per cent.; total estimated area for harvest of '96, 37,311 acres. Corn.—Prospects compared with an average, 86 per cent. Buckwheat.—Prospects compared with an average, 69 per cent. Clover Seed.—Prospects compared with an average, 60 per cent. The total wheat crop of the state reaches the enormous amount of 26,520,930 bushels of 81 per cent. quality. Of the state crop of 1894 11 per cent. is still in the producers' hands. Ohio's crop of oats for 1895 reaches the total of 31,973,052 bushels; the crop of barley, 352,364 bushels, and the crop of rye, 569,987.

**KANSAS.**—The Kansas State Board of Agriculture issued November 12 its final crop bulletin for the year, in which the item of foremost interest is, of course, that showing the yield of corn. It will be somewhat disappointing to those who have not revised their estimates made in June or early July and largely justified by the conditions prevailing at that time. Kansas has a great crop of corn; more with one exception, than in any previous year. The total product is 201,457,396 bushels, an average yield on the entire area planted (8,394,871 acres) of 24 bushels per acre. The average price of corn for the year is given as 23 cents per bushel, and the price at which it is being sold or contracted (delivered) now in the principal corn counties ranges from 16 to 21 cents, and averages 18 cents. Thirty-three per cent. of the crop is reported as likely to be disposed of at the latter average by the close of the present year. The quality is reported good, with occasional exception of some molding in the shock, attributed by correspondents to wet weather in August.

The total yield of winter wheat amounts to 15,512,241 bushels on the 4,056,514 acres sown, or 3,179,908 bushels more than the growers at the beginning of harvest estimated for the acreage then regarded as likely worth cutting. This would indicate that they finally harvested considerably more than had at first seemed of value, which gave them more wheat, although cutting the larger acreage lowered the average for all the acres. Of spring wheat the yield was 488,819 bushels on 115,457 acres sown. Only 66 per cent. of the wheat is reported as strictly merchantable for milling purposes, and the average price now ruling at the nearest milling or shipping markets is 47 cents per bushel, covering a range of 35 to 60 cents, dependent on quality and location.

The area sown to winter wheat the present season is estimated as about 70 per cent. of last year's sowing, or 2,839,559 acres. This notable decrease is accounted for by everywhere low prices of the product, inability in many localities to secure a supply of satisfactory seed, and unfavorable condition of the soil, except in a very few counties,

from extreme dryness at sowing time, for either plowing, seeding or germination. Much of that sown has made no showing as yet, although there are some sections where it looks very promising, while not of large growth. The prospect will be very much helped by the continuing mild weather and general rains reported in many counties while this information is being compiled—November 4 to 8 inclusive—tending to an increase in the acreage by encouraging further seeding.

The total yield of rye is 1,655,713 bushels, on 179,871 acres; worth 37 cents per bushel, or \$623,625.13. Oats, 31,664,748 bushels, on 1,606,343 acres; worth 17½ cents per bushel, or \$5,620,188. Barley, 1,690,545 bushels, on 118,805 acres; worth 26 cents per bushel, or \$441,431. Buckwheat, 6,598 bushels, on 87½ acres; worth 47 cents per bushel, or \$3,101. Kafir corn, 184,198 acres; value, \$1,668,389. Jerusalem corn, 31,923 acres; value, \$262,278. Milo maize, 16,377 acres; value, \$125,451. Millet and Hungarian, 638,232 tons, on 391,672 acres; value, \$3.21 per ton, or \$2,048,761. Broom corn, 30,255 tons, or 134,487 acres; worth \$40.40 per ton, or \$1,222,300. Timothy hay, clover, alfalfa and prairie hay cut in 1895, value (approximately), \$9,807,000.

## Fires, Casualties, Etc.

Semler & Co.'s elevator at Hamilton, Ohio, burned recently.

Spellman's elevator at Lawndale, Ill., was destroyed by fire on the night of November 4.

H. Negbauer, dealer in grain and cotton at Plano, Texas, was burned out recently. Insured.

The elevator at Annawan, Ill., was burned recently, together with 2,000 bushels of corn.

K. A. Kollier, dealer in grain, hay and produce at Henderson, Mich., suffered a loss by fire recently.

A. S. Brooks' granary near Emerado, N. D., containing 4,000 bushels of grain, was burned recently.

Mathew Crawford, grain dealer at Minburn, Ill., was burned out recently at a loss of \$509; no insurance.

E. H. Doan's elevator at McCook, Neb., was destroyed by fire October 14. Loss \$2,000; insurance \$1,000.

Lee Prentiss' grain warehouse and other buildings at Vermillion, S. D., were burned November 6. Loss \$2,000.

The grain and coal office at Cumberland, Iowa, belonging to E. Reichert was destroyed by fire October 13.

John Garrity, a farmer near Bridgewater, S. D., lost 500 bushels of wheat by fire recently. It was insured.

The cotton seed oil mill at Newton, Ala., was destroyed by fire recently, together with 800 bushels of seed.

Goodale & Son's potato starch factory at Gaylord, Mich., was burned recently at a loss of \$2,500. No insurance.

Hisey & Countz's elevator at Vandalia, Mo., was destroyed by fire November 6. Loss \$4,500; insurance \$2,500.

A large grain warehouse at Boyd's Station, Md., together with considerable grain, was destroyed by fire October 27.

In a general conflagration at Arcadia, Iowa, two elevators containing considerable grain were destroyed recently.

A crib on Colonel Davidson's plantation near Uniontown, Ala., was burned recently, together with 1,500 bushels of corn.

The H. H. Crouch Grain Co. of McKinney, Texas, was burned out recently. The loss was partially covered by insurance.

J. A. Robey & Co., grain dealers of Hillsboro, Texas, were burned out recently. Loss \$6,000; partially covered by insurance.

Conrad Johns' barn near Keithsburg, Iowa, was destroyed by fire recently, together with 600 bushels of wheat and 30 tons of hay.

J. A. McCanley's elevator at Ithaca, N. Y., was burned October 10. The grain it contained was valued at \$2,000. Estimated loss \$14,000; insurance \$7,500.

The elevator at Garfield, Ill., belonging to Gautz Bros., grain dealers of Wenona, Ill., was burned November 3. It contained 20,000 bushels of oats and 25,000 bushels of shelled corn, all of the latter belonging to farmers who carried no insurance. Loss



\$6,000; insurance on building \$4,000; on oats \$2,000. The fire is supposed to have started from a spark from a locomotive.

John Stahl, foreman of J. F. Harris & Co.'s elevator at Burlington, Iowa, was crushed to death in the machinery, October 23.

Edw. Reed's barn and granary at Illinois Grove, Iowa, were destroyed by fire recently, together with considerable grain and baled hay.

The Great Western Elevator at Cooperstown, N. D., containing 25,000 bushels of grain, was burned November 4. Loss \$25,000; insured.

The elevator, feed mill and buckwheat mill belonging to the N. C. Foster Lumber Co. at Fairchild, Wis., were destroyed by fire October 20.

Jesse Burgett's elevator at Duval, Ohio, was destroyed by fire recently which originated from a spark from a locomotive. Loss \$5,000.

Claus Erp's elevator at Carroll, Iowa, was destroyed by fire November 4, together with considerable grain. Loss \$1,500; insurance \$1,400.

The elevator and grist mill belonging to F. Dwight & Co., near Montpelier, Ohio, were destroyed by fire recently. Loss \$28,000; insurance \$15,000.

Morgan Shaffer's grain barn near Scottsville, N. Y., was burned November 2, together with 25 tons of hay, 400 bushels of wheat and 400 bushels of beans.

J. M. Carlisle & Co., dealers in grain and groceries at Plano, Texas, sustained a loss by fire recently amounting to \$7,800. Insurance \$2,500.

A workman shelling corn at T. D. Hanson & Co.'s elevator at Villa Grove, Ill., was injured recently by a large piece of timber falling on him.

Erwin's corn cribs at Pesotum, Ill., containing 5,500 bushels of corn, were burned October 19, the fire starting from an engine running a corn sheller.

The elevator of Eberhard & Co., dealers in grain, etc., at Clarence, Mo., was destroyed by fire October 17, the loss amounting to \$3,000. There was no insurance.

A farmer near Holdredge, Neb., lost 250 bushels of oats and 1,200 bushels of ear corn by fire October 21, which was set by children who were playing with matches.

W. A. Ward's elevator at Bromley, Iowa, was destroyed by fire October 13, together with 4,000 bushels of grain. The loss on the elevator was \$1,500; insurance \$3,000.

The St. Paul and Kansas City Grain Co.'s elevator at Marshalltown, Iowa, containing 5,000 bushels of grain, was destroyed by fire November 12. Loss \$10,000. Insured.

An elevator at Coles, near Mattoon, Ill., containing 1,500 bushels of corn, 60 tons of broom corn, considerable baled hay and straw and several cars of grain, was burned recently.

John Richardson's broom corn shed at Waynesfield, Ohio, filled with broom corn and millet seed, was destroyed by fire recently. Loss \$5,000. It was of incendiary origin.

Sparks from a thrashing machine engine on the farm of James Harvey in Dodge County, Nebraska, started a fire which consumed 25 tons of hay and several stacks of grain.

A farm hand lit his pipe in a corn field near Harwood Mo., the other day, and 100 acres of corn were burned. Near Montevallo, Mo., 200 acres of corn were destroyed by fire.

Mahlon Haller's large barn near Woodstock, Va., was destroyed by fire October 28, together with 600 bushels of wheat, a quantity of corn and cloverseed. Loss \$2,000; insurance \$1,000.

H. A. Kellogg's grain warehouse at Kirksville, Mo., was destroyed by fire October 18, together with considerable grain. There was \$2,000 insurance on the building, none on the contents.

The Perseverance Rice Mill at New Orleans, La., was burned on the night of October 18, together with other buildings and rice valued at \$40,000. The loss is estimated at \$500,000; insured.

The cooker in one of the buildings of the American Starch Works at Waukegan, Ill., blew up recently, ruining the building. The loss is estimated at \$5,000. The main buildings were not damaged.

The engine room of Armour's elevator "F" at Chicago was recently damaged by a tug explosion in the Chicago River, a portion of the tug's boiler crashing through the walls of the engine room.

Hal. Walmsley's barn at Arthur, Ill., containing 200 bushels of oats, 500 bushels of wheat and considerable corn, was burned October 28. Loss \$2,000. The usual spark was the cause of the fire.

Three elevators at Madison, Minn., were destroyed by fire on the night of October 21; one belonged to the Central, and one to the Pacific Elevator Co., each containing 5,000 bushels of wheat, and the other to

Madison Produce Co. which lost 4,000 bushels and two cars of wheat. The Central and Pacific elevators were each insured for \$5,000. The total loss, including that on other buildings, is \$150,000.

J. L. Pumphrey's elevator at Heyworth, Ill., was destroyed by fire on October 23, together with his electric light plant, causing a total loss of \$17,000; insurance \$10,000. The elevator may be rebuilt.

George Young, formerly a well-known grain man of Baltimore, Md., and a member of the Corn and Flour Exchange, committed suicide by shooting himself recently at his home at Hanover, Pa.

An elevator at Faribault, Minn., was destroyed by fire November 3, together with 35,000 bushels of wheat. A warehouse was also burned in which there were \$40,000 worth of flax, barley and oats.

Aaron Klose's elevator at Mifflin, Pa., which contained grain valued at \$5,000 belonging to the Buffalo Milling Co., was destroyed by fire October 27. The loss on the building is \$2,000; insurance \$1,000. It was of incendiary origin.

Chas. Counselman & Co.'s elevator and crib at Oxford, Iowa, were destroyed by fire October 20. There were 20,000 bushels of oats in the elevator and 8,000 bushels of corn in the crib. The loss on the buildings is about \$10,000. Insured.

The Des Moines Elevator Co.'s elevator at Des Moines, Iowa, was burned October 23, causing a loss of \$50,000 on the building, and of \$20,000 on the contents. An insurance was carried of \$12,500 on the building, and of \$10,000 on the grain.

A blaze recently started in the American Cereal Co.'s elevator at Cedar Rapids, Iowa, causing a loss of \$200. The elevator is thoroughly equipped with the Grinnell Fire Extinguishers, and when the fire started seven heads opened and controlled the fire.

The National Linseed Oil Company's Crescent Mills at Chicago were destroyed by fire on the night of October 23. The fire started near the top of the building, where were stored 100,000 bushels of seed. The loss is estimated at \$150,000. A heavy insurance was carried.

John Bell of the grain commission firm of Van Leunen & Co., Cincinnati, Ohio, was seriously injured recently at the company's elevator at Seven Mile. He was crushed between a grain spout and a car. He was removed to his home at Elmwood, and it is hoped will recover.

Oliver Decker recently met with a serious accident at the Wisconsin Malt and Grain Co.'s plant at Appleton, Wis. A brick fell from the new smokestack and struck him on the head. Although he suffered a compound depressed fracture of the skull, there is a probability of his recovery.

## OBITUARY

Edward Annan, the well-known elevator owner of New York City, died November 11.

M. Montigue of the firm of Montigue & Walker, dealers in grain, fuel and lumber at Bridgewater, S. D., died recently.

M. J. Brown, commission merchant and member of the Baltimore Corn and Flour Exchange, died recently at his home at Baltimore.

Philip Breckman, president of the Brockman Commission Co. of St. Louis, Mo., died October 24. Mr. Breckman was 54 years old; he was well known in the city and was a prominent member of the Merchants' Exchange.

Samuel P. Grafflin, of the firm of S. D. Grafflin & Son, grain dealers of Logansport, Ind., died November 1. Mr. Grafflin was born at Covington, Ky., and went to Baltimore when a boy. About 15 years ago he removed to Logansport and engaged in the grain business with his father.

John H. Hebert, a well-known grain broker of New York, and a member of the Produce Exchange, died recently, at the age of 67. Mr. Hebert had been connected with the grain trade practically since boyhood. He had been in poor health for over a year and was nearly blind at the time of his death.

Archibald Shaw of the grain commission firm of A. & J. Shaw & Co., Chicago, died October 29 from progressive paralysis. Mr. Shaw was born near Londonderry, Ireland, 62 years ago, and came to America in 1860. In 1869 he came to Chicago and became a member of the Board of Trade, where he was operating extensively until about a year ago, when he was confined to his bed by sickness.

Two boys were recently arrested and fined at St. Cloud, Minn., for stealing grain from Great Northern cars.



James M. Nelson is buying grain at Meyer, Ill.

Lee Van Reed has taken charge of the elevator at Williamsport, Ind.

B. G. Peters is buying grain at Kendrick, Wash., for the West Coast Grain Co.

William Harkness of Buck's Grove, Iowa, has been engaged by the Kansas City Grain Co.

John Barclay, corn broker of Chicago, has returned from a visit to his old home in England.

Edwin Johnson, grain buyer at Cambridge, Iowa, was married to Miss Ella Benfer on October 23.

G. H. Norton has resigned the position of grain buyer for the Central Elevator Co. at Bode, Iowa.

P. C. Ries, formerly of Kenton, Ohio, has taken the position of bookkeeper for a Chicago grain firm.

James McCormack, grain and stock dealer of Irwin, Mo., has gone to California for the winter, with his family.

J. D. Jones, formerly with the Chicago O'Neill Grain Co. of South Chicago, Ill., is now at Winona, Minn., with the H. J. O'Neill Grain Co.

J. Allen Worth, grain broker of the New York Produce Exchange, was recently married and has returned from a ten days' wedding trip.

John F. Howard, until recently with H. Linebarger & Co., Chicago, is now on the road for the Calumet Grain and Elevator Co. of Chicago.

Walter E. Orthwein, formerly of St. Louis, has taken charge of the grain exporting business of the Wm. Orthwein Grain Co., at New Orleans, La.

Edwin W. Shields, the junior member of the Simonds Grain Co. of Kansas City, Missouri, was married November 6, to Miss Deardorff of the same place.

William Haywood has been promoted from the position of assistant in an elevator at Marcus, Iowa, to business manager of an elevator at Sulphur Springs.

H. J. O'Neill, the great barley dealer formerly of Winona but now residing in Chicago, was married on October 17 to Mrs. E. C. T. MacPherson of Winona, Minn.

R. E. Osborne, vice-president of the Osborne-McMillan Elevator Co., has returned to his home at La Crosse, Wis., from a summer's tour of Europe with his family.

David G. Owen, president of the firm of Owen Bros. & Co., grain commission dealers of Milwaukee, Wis., was married at Norwalk, Wis., October 26 to Miss Ella Severson.

C. A. Couch, grain dealer of Malden, Mass., is something of an inventor. He has a patented passenger-car heater which he is preparing to supply to the Boston & Maine Railroad.

Thomas Young, who does business at the New York Produce Exchange, was recently given an ovation by the wheat pit upon the occasion of his election to the mayoralty of Fanwood, N. J.

A. J. Green, grain dealer of Windsor, Ont., in his suit against J. D. Anderson, banker, of Essex, from whom he was induced to buy a patent under fraudulent representations, has recovered \$850.

The Exchange Elevator Co.'s elevator at Buffalo, N. Y., is managed by John W. Frear, who has served in that capacity since the house was established in 1890. He is a young man, but an expert in the grain business.

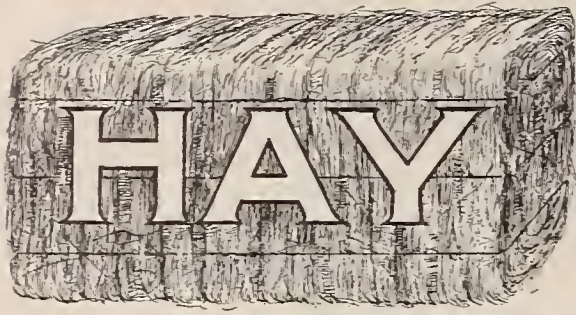
Henry Smith, who carries on a good grain business at Jefferson, Iowa, finds time to do some farming. This year he had 40 acres of oats which averaged over 87 bushels to the acre, and 70 acres which averaged over 70 bushels per acre.

Thos. G. Wells, who has been the local manager of George Balch's grain business at New York City for nineteen years, has taken charge of the cash grain department of S. Gruner & Co. It is said that Mr. Balch contemplates retiring from active business.

The Missouri Board of Railroad and Warehouse Commissioners has elected J. O. A. Hiller chief inspector of the state grain department for the term of four years to succeed J. M. O'Shea, whose term expired November 1. Mr. Hiller is a farmer of Barton County, Missouri, and was for several months the state weighmaster at St. Louis.

Send us the grain trade news of your market.





The freight charges are as high on the poorest hay as on the best.

The National Hay Association's new rules for grading have gone into effect on the Chicago market.

The November report of the Department of Agriculture gives the average yield of hay at 1.03 tons per acre.

The canal boat W. H. Swift, loaded with hay from Canada, was recently destroyed by fire at Whitehall, N. Y.

The Kankakee marsh, in Illinois, was recently swept by a fire which destroyed a very large quantity of hay.

D. W. Kane's barn at Willis, Mich., was destroyed by fire recently, together with 12 tons of hay and 20 tons of straw.

A shipper of hay should be careful in loading a car of hay, to see that each and every bale is of the grade intended.

The Great Western Distillery at Pekin, Ill., recently bought 1,000 tons of wild hay cut on the island at Henry.

Three hundred tons of hay were recently destroyed by fire at St. Cloud, Minn., a spark from a locomotive being the cause.

A fire in W. Seyk's hay sheds at Kewaunee, Wis., on October 22 destroyed 300 tons of hay. The loss is estimated at \$3,000, insurance \$800.

Robert E. McConnell, of the firm of McConnell Bros., dealers in baled hay, straw, etc., Warsaw, N. Y., has opened a store in Buffalo, N. Y.

The E. M. Cafferty Hay Co., formerly of Addison, N. Y., has equipped a hay cutting plant at Rathbone, N. Y., where it will hereafter conduct business.

A prosperous farmer near Bloomington, Ill., says that alfalfa is the coming feeding hay for his section of the state, and that farmers are beginning to realize it.

The Washington (D. C.) Grain Exchange at a recent meeting passed resolutions adopting the changes in grading made by the National Hay Association.

The Kilmer Manufacturing Co., manufacturers of bale ties at Newburg, N. Y., has been dissolved, receivers being appointed. The indebtedness of the company is said to be about \$50,000.

A fire was started on the prairie near Hardin, Mo., and many tons of hay were destroyed. Part of the crop had been baled and taken away, but the greater portion was on the ground, either baled or in the rick, and none of it was saved.

According to the twentieth annual report of the Massachusetts Experiment Station, hay has become too costly to feed to cattle. The report says: "The many experiments at this station have shown that hay is too costly to be fed in large quantities to cows and growing stock. Its place should be taken by other coarse feeders."

Don't blame the commission man for not getting the price of No. 1 hay when No. 1 is not shipped. A very large majority of the cases of dissatisfaction and loss of money to shippers is owing to the fact that so much of the hay that is loaded for market is improperly graded or selected. Of course the shippers do not do it intentionally, but they ought to learn the grades.

The Western Hay and Grain Co. of Omaha, Neb., has brought suit against the Union Stock Yards Co. for \$8,000 for breach of contract. In its petition the plaintiff alleges that it made a contract with the defendant for 1,000 tons of hay at \$8 per ton. In due course of time the hay was delivered, but the stock yards company refused to pay the contract price because in the meantime the price of hay had gone down.

From the consumer's point of view the dearest hay is that which is sold for least money, because it is out of condition. Clover hay is an exception, as it has always sold for less than its feeding value. Hay that is stained with rains and with heating has lost a great deal of its nutritive value. An agriculturist gives it as his opinion that as much

of the poor hay sold for low prices is filled with weed seeds, it is dear to any farmer as a gift, and for this reason, as well as for its bulkiness, the hay to be used on a farm ought always to be grown on it, leaving only the grain and concentrated feeds to be purchased.

The grading rules adopted by the National Hay Association were a necessity long before they were drawn up. Of course no commercial exchange with a hay market was without established rules; but they were very seldom put to a test, the idea seeming to be that they were in existence for the mere purpose of serving as a certain basis in case of disputes. The inspection of hay was more or less impracticable unless each and every bale should be examined and this was impossible without too much expense. No wonder the buyer preferred to see what he was buying rather than trust to official inspection. For export, official grading is of course quite necessary. The National Hay Association's rules were formulated on a practical basis designed to do away with many objectionable features and to secure uniformity, but there are markets which still decline to accept them.

In the absence of reliable statistics of hay shipped from this province during the past two months, it is difficult to arrive at what proportion of the present crop has already been sent out of the country, says the Montreal Trade Bulletin. Some of our dealers and shippers estimate that fully 50 per cent. of the surplus crop of 1895 has been sold, while others say not one-third has yet been marketed. Then again dealers from sections west of this city right into Eastern Ontario state that most of the surplus hay has been shipped out of those localities; but little reliance can be placed therein, as farmers seldom bring out all their hay on a rising market; and, besides, those districts that last spring were reported to have had their supplies of hay completely exhausted contributed large quantities of old hay since the American and Ontario demand set in, showing that when buyers can pay the price the hay can be found. It is difficult to arrive at the exact quantity that has been exported to the United States and Ontario on account of the bulk of shipments being sent from country points through to their destination, a great deal of it not touching Montreal.

#### NOT UP TO QUALITY.

A Montreal shipper forwarded a quantity of hay to a point in Ontario, says the Montreal Trade Bulletin, in fulfillment of an order at \$12.00 on track at destination; but the receiver, as soon as the hay arrived, telegraphed to say he could not take it, unless an allowance was made of \$2.00 per ton, as the quality was not right. Upon receipt of this message the shipper at once took the train for the seat of the trouble, in order to satisfy himself as to the poor quality complained of. Upon arriving at the station, the shipper met another hay dealer of the same place, and the two examined the cars together and found the hay of excellent quality, whereupon this dealer offered \$13.00 per ton for it, and got it before the dealer—who bought it at \$12.00 per ton and wanted a reduction of \$2.00—knew anything of the transaction.

#### REVIEW OF CHICAGO HAY MARKET.

The prices for hay ruling in the Chicago market during the last four weeks, according to the Trade Bulletin, were as follows:

For the week ending October 19 the receipts of hay were 7,732 tons, against 8,399 tons the previous week; shipments for the week were 1,069 tons, against 1,196 tons for the previous week. The arrivals of both timothy and upland prairie were again liberal and the market was dull throughout the week. The quality continues poor, a large portion of the offerings being coarse and off color. Choice grades were in fair demand at about unchanged prices, but poor hay was very difficult to sell and prices ruled lower. Sales of choice timothy ranged at \$12.50@13.50; No. 1, \$11.75@12.50; No. 2, \$10.50@11.50; mixed, \$7.50@10.00; not graded, \$5.00 for poor and \$9.00@12.50 for good to choice; Illinois Upland Prairie, \$5.00@8.75; Indiana, \$8.00; Kansas, \$7.00@10.50 for poor to fancy; Nebraska, \$8.50@9.50; Dakota, \$7.00@7.25; Indian Territory, \$7.25@8.25; Oklahoma, \$9.00; Iowa, \$5.00@7.50 for poor to fair, \$8.00@11.00 for good to fancy; packing hay, \$5.25. Wheat straw sold at \$5.00, and rye straw at \$6.00@6.75.

For the week ending October 26 the receipts were 8,301 tons, shipments 1,209 tons. The market for timothy hay ruled firm during the early part of the week. The offerings were only moderate and the demand was quite good. Later the receipts became heavy and the demand fell off materially. Prices declined 50 cents per ton and the market closed dull at the reduction. Upland prairie was very dull throughout the week. The arrivals were excessively heavy, and while the demand was fair it was not sufficient to absorb the large offerings, and a number of consignments were carried over from day to day. Prices declined about \$1 per ton. Sales of choice timothy ranged at \$12.50@13.50; No.

1, \$11.50@12.50; No. 2, \$10.50@11.50; not graded, \$6.00@12.50; thrashed, \$7.50; Illinois Upland Prairie, \$5.50@7.25; Indiana, \$6.00@7.50; Kansas, \$7.00@10.50 for poor to fancy; Nebraska, \$8.50@9.50; Indian Territory, \$7.50@8.00; Oklahoma, \$8.50; Iowa, \$5.00@10.50 for poor to fancy; packing hay, \$5.00. Oat straw sold at \$4.75@5.00, and rye straw at \$5.25@6.50.

For the week ending November 2 the receipts were 7,915 tons, shipments 1,124 tons. For strictly choice timothy there was a very fair demand during the week. Only a small portion of the daily arrivals could be classed as choice. Prices exhibit no material change. Medium and low grades were in large supply and very dull. Little or no demand for this class of stock and receivers found it very difficult to dispose of consignments. Prices irregular, depending entirely on the quality. The market for prairie hay was in a demoralized condition; arrivals were large and the market overstocked. Inquiry only moderate and a very dull feeling existed. Prices declined 25@50 cents per ton. Sales of choice timothy ranged at \$12.50@13.50; No. 1, \$12.00@12.50; No. 2, \$11.00; No. 3, \$8.00@11.00; not graded, \$8.00@11.00; clover mixed, \$4.00; choice prairie, \$9.00@10.75; No. 1, \$7.50@9.00; No. 2, \$7.00@8.00; No. 3, \$7.00; No. 4, \$4.50@5.50; not graded, \$5.00. Rye straw sold at \$5.00@7.00, and oat straw at \$4.75@5.00.

For the week ending November 9 the receipts were 6,985 tons, shipments 1,114 tons. There was no particular change in the market as compared with the previous week. Strictly choice timothy was in good demand and a firm feeling prevailed. Low and medium grades continue dull. Arrivals large. A dull and dragging market was experienced for upland prairie. The receipts continued large and only a fair demand existed, with only choice, bright, green hay wanted. Prices ruled weak but not particularly lower. Sales of choice timothy ranged at \$12.75@13.75; No. 1, \$11.50@12.50; No. 2, \$10.50@11.50; No. 3, \$9.00; not graded, \$8.00@12.00; choice prairie, \$9.00@10.50; No. 1, \$8.00@9.00; No. 2, \$7.00@8.00; No. 3, \$5.50@7.00; No. 4, \$5.75. Rye straw sold at \$6.00@7.00, and oat straw at \$4.50.

#### A REMEDY FOR CHICAGO HAY TRADE TROUBLES.

*Editor American Elevator and Grain Trade:*—I am anxious to speak to the hay trade in general, to the pressers, shippers and receivers of baled hay and straw. I find by twenty years of active experience in all branches of the business, from plowing the ground, seeding the land and cutting, baling and shipping the hay, as well as being in the commission business for twelve years, that baled hay is not handled as it should be, especially at Chicago.

In the first place, I will speak of the way in which hay is handled in this market. You consign your hay to a commission merchant here, and if it is all straight and uniform, and is sold at the market price, it may be unloaded promptly; but I know from experience there is not one car in five—yes, I can safely say not one car in five—that runs straight and uniform.

Here is where all the trouble come in and where shippers suffer. When a car does not run straight and uniform the buyer throws it up and it must be sold again. Then car service begins, and after a car is sold once buyers do not want to have anything to do with it unless they get it at a very low price—for much less than it is worth—and if the commission man does not sell it, he puts his teams to work and hauls it out of the car. Of course, he cannot do this for nothing; neither can he spend his valuable time looking up another buyer. Then what is he to do with this car? Well, there are a number of places where he may be able to place it. He may have an order for a few cars to go north, east or south, and it may fit in there, or he may deliver it to some consumer in the city; but this, you can plainly see, is a very loose way for the shipper's property to be handled, and also a very expensive way.

Now, here is the keynote to the whole situation. Why are shippers of hay and straw to Chicago not entitled to railroad warehouses, as well as shippers in the East? In New York, Boston, Philadelphia and other large cities, the hay is unloaded into railroad warehouses immediately upon its arrival and each car is properly and separately piled, inspected and marked. The buyer then has an opportunity of examining the hay and satisfying himself before he buys; then a sale is a sale, and there is no going back on a car after it is sold. Furthermore, when hay is unloaded into a warehouse on its arrival, it prevents it from becoming hot during the summer months.

It seems to me that the commission men in this city are not working in the shipper's interest when they do not advocate this method of handling hay, from which shippers would derive great benefit and be money ahead. There would be no chance whatever then for delays in reporting immediately the condition of a shipment of hay, but at present it is impossible. It seems to me that it would be less trouble and expense for the railroad companies to build hay warehouses and unload this hay on its



arrival, than to have it detained on their tracks here for two or three weeks, as is often the case.

I have advocated this reform for several years, and until such is brought about shippers will continue to suffer just as they have for the last fifteen years.

Yours truly,  
M. H. HERELEY,  
President Hereley Bros. Commission Co.  
Chicago, Ill.

## WATERWAYS

The new lock in the American Sault will be completed early in the spring.

The steamship Missoula foundered recently near Carabou Island, with a cargo of 50,000 bushels of wheat. The vessel was insured.

The steamer S. S. Curry went aground at Bois Blanc Island, off Amherstburg, Ont., Lake Ontario, October 29, materially damaging her cargo of wheat.

The steamers Owen Sound and S. G. Worts, loaded with wheat, went ashore near the entrance to Georgian Bay and their cargoes were considerably damaged.

The steamer Business with a cargo of wheat was run into November 4 by a whaleback near Grosse Point in Lake St. Clair, and sunk. There was an insurance of \$30,000. The grain was uninjured.

The canal boat First National, loaded with 8,000 bushels of wheat, collided with a tug in the Chicago River recently and 1,000 bushels of wheat were damaged by water.

There is such a low stage of water at Buffalo that steamers are running on the bottom in getting to the elevators, and this, together with a rush of grain, has resulted in a blockade.

The shipments of wheat from Superior, Wis., on October 26 were heavier than for any previous day, 600,000 bushels being loaded out of elevators on the Wisconsin side of the bay alone.

There are about 500,000 bushels of grain on barges in the Cornwall Canal, where it is detained on account of low water. The grain is for Montreal grain men, to be shipped to Europe.

The schooner Lizzie A. Law, Chicago to Buffalo with 55,000 bushels of corn, sprung a leak off Sturgeon Bay, Wis., and the cargo was considerably damaged. Only the grain was insured.

The steamer John Craig sank off Detroit, Mich., October 20. She had a cargo of 74,000 bushels of wheat, most of which was damaged by water. The grain was insured, but the steamer was not.

The Ottawa and French River Canal Company has asked the Canadian government to guarantee \$15,000,000 4 per cent. bonds to insure the construction of a canal 9 feet deep from the St. Lawrence River to Georgian Bay.

The new steamer Zenith City, which recently broke the record with the largest cargo of grain moved from a Lake Superior port, has broken her own record by 2,000 bushels, carrying 140,000 bushels of wheat from Duluth to Buffalo.

A recent consular report of the Suez Canal states that the gross receipts in 1894 were \$15,390,230.60, against \$14,764,906.80 in 1893. Receipts from vessels using the canal were \$650,800 higher than in 1893, and expenses were \$65,958.60 smaller.

Low water in Lake St. Clair caused a blockade of vessels on October 29. It is said that the bar at Grosse Point came nearer the surface than ever observed before, and the vessels bringing up on it blocked the channel for a whole day, when the water raised.

The steamer W. B. Hall ran on the Magnetic Reefs in the Straits of Mississauga, Lake Ontario, October 29, and sprung a leak. She had a cargo of 25,000 bushels of wheat consigned to McBean & Co. of Toronto, which was materially damaged. Vessel and cargo were insured.

Wet grain seems to be the rule rather than the exception of what is shipped by water this fall. Two vessels struck bottom in the Detroit river recently and each had several thousand bushels of wheat wet and were compelled to unload. A good grain dryer would minimize many losses on the lakes.

The President has appointed a commission to meet and confer with a similar commission yet to be appointed by Great Britain or the Dominion of Canada, with reference to the creation of a deep water connection between the lakes and the Atlantic, and if any part of this channel shall fall

within Canadian lines they are to determine what treaty stipulations are necessary to insure the free use of the channel to citizens of the United States on equal terms with Canadians.

Owing to low water in the River St. Lawrence considerable difficulty is being experienced in shipping. Steamers are unable to take on full cargoes and this has resulted in such a block of freight at the exporting port of Montreal that it seems likely a good deal of freight will be diverged to Portland, Boston and New York.

The steamer Centurion ran on a reef off Isle Royal, Lake Superior, October 29, and a large portion of the cargo, consisting of flour and copper, had to be jettisoned. The underwriters estimate the loss as over \$175,000, the largest average loss ever occurring on the lakes. There was an insurance of \$200,000.

It is said that the entire fleet of whaleback steamers on the lakes has been engaged from November 1 for the balance of the season to carry wheat from Duluth to Buffalo at 6 cents per bushel. Though probably not more than two weeks of the season remains, this fleet could nevertheless move a vast quantity of grain.

A fire recently occurred in one of the hatches of the British vessel Thomas Anderson, which was being loaded at Philadelphia, and 20,000 bushels of corn had to be replaced. The fire is supposed to have originated from a candle used by the trimmers at the elevator, that connected with the felt-lined bulkhead in the hatch.

There is a movement among the members of the Lake Carriers' Association to ask the government to take control of the movements of vessels in the American Sault Canal and establish rules governing navigation. It is designed to avoid the many accidents which have happened this season, and the underwriters will support the petition.

The National Waterways Association recently met at Vicksburg, Miss., and adopted resolutions in favor of the Nicaragua Canal, advocating the fostering of the commerce of the great lakes and endorsing the work of the International Deep Waterways Association, also recommending to Congress the connecting of the lakes with the Ohio and Mississippi rivers.

Erie Canal will be improved. The proposition to appropriate \$9,000,000 for that purpose was carried at the recent election in New York. Of the \$9,000,000 appropriated, \$4,000,000 are immediately available, and work will commence early next spring. The Champlain Canal will be deepened to 7 feet and the Oswego and Erie to 9 feet, and other improvements consist of improved machinery and locks.

The total amount of freight passing the American and Canadian Sioux Canals during October was 2,008,253 tons, 143,000 tons less than the business of the American canal alone in October, 1894. Wheat shipped amounted to 10,052,000 bushels, flour 1,313,000 barrels. The total traffic for the year to October 31 amounted to 13,241,271 tons, against 11,748,986 during the corresponding time in 1894.

On the last day of the time allowed by Congress the Nicaraguan Canal Commission handed in its report to the President, which, however, has not yet been made public. The commission had to take a fully equipped surveying party to Nicaragua, examine every foot of the projected line, ascertain the character of the adjacent country, with a view to improving upon the line projected if possible, visit the Panama Canal and form a judgment upon the enduring qualities of earthworks exposed to heavy tropical rains and finally compile all of their measurements and information and prepare estimates of cost.

A public test of the electric towing system on the Erie Canal was given at Tonawanda, N. Y., October 26, and it was reported as successful. Two boats loaded with sand were first towed down the canal and then five light boats, at a speed of four or five miles an hour. The experiments were superintended by Richard Lamb, the inventor of the system, and the power was generated by the Niagara Falls Power Co. It is already confidently asserted that "the mule must go," but it seems to have been forgotten that the mule is a very obstinate beast, not always going when desired. However, the promoters of the scheme will endeavor to obtain the approval of the state authorities and will immediately prepare to furnish motive power for 3,000 canal boats.

At a recent meeting of the American Society of Civil Engineers, T. C. Clark, C. E., read a paper in which he concluded that a 7,000-ton ship could carry grain from Chicago to New York via the Erie Canal, deepened to 25 feet, for 3.22 cents per bushel; that, with the Erie Canal deepened to 9 feet, it would cost 4 cents a bushel, in steel barges, 90 feet long, steam-towed. He also deduced that a steel barge 17 1/2 feet wide, 7 1/2 feet draft, 180 feet long, could be towed from New York to Chicago and carry grain for 2 1/2 cents a bushel. In reply to his argu-

ment it was stated that by properly applying his basis of cost grain could be carried from Chicago to New York via the St. Lawrence and Lake Champlain route in a 7,000-ton vessel for 43 cents a long ton, equal to 1.15 cents a bushel.

## OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

John O. Foering, Chief Grain Inspector, Philadelphia, Pa.  
G. M. Robinson, president of the Sterling Gas Engine Co., Sterling, Ill.  
J. F. Oglevee, president of the Case Manufacturing Co., Columbus, Ohio.  
A. M. Walters, representative of the Richmond City Mill Works, Richmond, Ind.

## HE BULLED THE WHEAT MARKET.

At the corner of Broadway and Wall Street a man accosted me the other day with an inquiry for the nearest police station, and, of course, I asked him what was the matter. He was mournful rather than mad, and not a bit excited as he answered:

"Wall, I guess I don't want the police station after all, though somebody ought to be arrested. I went down in Wall Street about two hours ago thinking I'd speculate. I've heard and read of Wall Street so much that I thought I'd try my luck."

"So you went to a broker's office?"

"Noap. I don't know nuthin' 'bout brokers. I walked up and down fur awhile and then got my eye on a sharp lookin' young feller and made up to him and asked:

"'Yongg man, can you tell me whar I can put up \$10 on the wheat market?"

"'I kin,' says he. 'Jest gimme yer money and I'll buy ye a thousand bushels.'

"I gin him the money and we stood around fur awhile, and then went into a place to look at what they calls a ticker. Arter he'd looked the young man said:

"'Ole man, she's broke five p'int, and you are closed out. She's sure to turn, though, and you'd better put up another five.'"

"And you did," I asked.

"Wall, yes. I put up another five, and the market went up and I cleared \$3. Then she went down and I lost the hull thing. Then I got kinder excited and put up \$15 all at once. In about five minutes the young man said if Chicago kept out of the deal I'd make a cool hundred. Five minits later Chicago jumped in and I lost my fifteen."

"And then you quit?"

"Wall, yes. That is, the young feller asked if I had any more money to bull the market with, and when I said no he did the quittin'. I was lookin' around fur him when a man told me I'd bin swindled. I was mad nuff to bust at fust, but I guess I won't do nuthin' 'bout it. I've seen Wall Street. The lamb has met the lion and the lamb wasn't in it!"

"But the experience will be valuable to you."

"Yes, she will. Jest about the time I realized I'd bin swindled a feller cum along and asked me where Broadway was and I hauled off and knocked him head over heels down a basement! You bet they don't git ahead of me again in this town!"

The Southwestern Traffic Association has agreed to cancel through rates in connection with the Des Moines, Northern & Western Railroad.

In the case of John K. Comstock and Justus G. Coats of Chicago indicted on a charge of keeping a bucket shop, it was held by Judge Hutchinson that: "The spirit and intent of the bucket shop law is to protect people who are deceived and robbed. The evidence in this case shows that the complainant was not deceived nor robbed. In the language of the Board of Trade the complainant was a winner. The defendants are found not guilty."



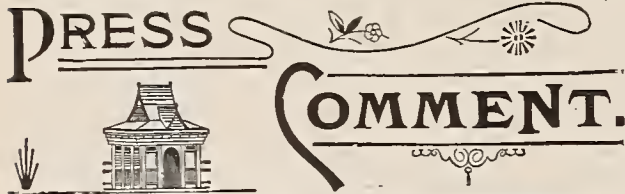
OUR CORN CRIB.—Corrugations.



## THE MARKETS.

[We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.]

Grain Report of Collins & Co., Cincinnati, November 9.—The rainfall has been pretty general throughout the winter wheat belt during the past week, and the sown grain that has been lying in a dormant state will in all probability assume a more encouraging outlook. The movement of grain to market is not very large, as prices are too low to offer very much inducement for more liberal shipping, and on the other hand the demand is not so active as to cause any enhancement in values, as trading is but moderately active. **WHEAT.**—Is in light supply and prices are steady. No. 2 Red at 66¢@66½ cents, No. 3 Red at 63¢@64 cents. Sample lots range from 58¢@62 cents, as to quality. **CORN.**—The supplies of old shelled corn are light, and it is firmly held at 32 cents for No. 2 White or Mixed, No. 3 at 31 cents. There is more of new coming on the market, the bulk of which is grading No. 3, and it is selling at 27½¢@28 cents, cool and sweet samples, too damp to grade, at 27¢@27½ cents, as to dryness. The demand is moderately active for new. **EAR CORN.**—Is arriving more freely and prices are about steady, with more urgency on the part of holders to sell, and lower prices will have to be accepted to induce trading, unless the receipts should grow less. Choice yellow ear at 28½¢@29 cents. Mixed and white range from 27¢@28 cents, as to quality. **OATS.**—Are a little more freely offered, with prices ruling steady. No. 2 White at 22¢, No. 3 White at 20¢@20½ cents, No. 2 Mixed at 20¢@20½ cents, for heavy stock, some light weight selling at 19½¢, No. 3 Mixed at 18½¢@19 cents, samples ungraded at 17½¢@18 cents. **RYE.**—Is very little offered or wanted, No. 2 is nominally quotable at 40¢@41 cents. **HAY.**—The market is still overstocked with low grades which drag along at prices that occasionally induce purchases, but they go off very slowly. The top qualities of timothy or clover are wanted, with choice timothy at \$15.00, No. 1 at \$14.25@14.50, No. 2 at \$11.50@12.00, No. 3 at \$8.00@9.00, No. 1 Clover at \$12.50@13.00, No. 1 Clover Mixed at \$12.50@13.00, No. 2 Clover and No. 2 Clover Mixed at \$10.00@11.00. Prairie is more abundantly offered, and it is dull, choice upland at \$9.00@9.50. Straw is inquired for, and good bright wheat will bring \$4.75@5.00. **MILLFEED.**—Dull and lower, with the offerings quite liberal. Bran at \$11.00@11.50, middlings at \$12.00@12.50.



### CHICAGO CASH MARKET.

Chicago itself seems to be awakening to the fact that as a cash grain market, its day has past, except possibly on the corn and oats, and they will need to keep a very sharp eye on Duluth as regards these two grains. While we have not as yet received a bushel of corn on this crop, Duluth, as a corn market, will offer a bigger surplus even than as a flax market, and on this crop, too. Between its private wires, private elevators, weight and grade controversies, Chicago has pretty well alienated the confidence of the country shippers.—Commercial Record, Duluth.

### THE SPECULATOR.

The speculator is a kind of middleman that whatever else he does or fails to do generally enlivens trade. The speculators have always had to contend against the prejudice of regular buyers who would on the whole much prefer to see them barred out entirely. It is a fact, however, that the scalper is often a help even to the buyers who would do away with them. For instance, a big concern wants to do a big business on a comparatively light run and knows that any display of the fact would result in a 10-cent advance. The buyers for the big concerns sit on the fence and laugh at sellers while they quietly give a number of scalpers the word to load up. The scalper turns over his purchases at a small profit, and the buyer is ahead on the deal. As a rule, however, the scalpers are more of a benefit to the selling than to the buying side.—Drovers' Journal.

### ALL DUE TO THE BEARS.

A striking example of the evils of gambling in "fictitious" wheat has recently occurred in Germany, whereby the farmers of that country have suffered to the extent of millions, in consequence of a "bear" raid in wheat on the Berlin Produce Exchange. The case is being investigated officially by the Imperial Government, and is causing considerable excitement in agricultural circles. The case is very similar to that of the Chicago grain elevators last year, when wheat "options" and "futures" on both sides of the Atlantic fell in a state of panic, carrying the price of English wheat down to the lowest ever recorded, viz., 17s. per quarter. Mr. Charles W. Smith has been requested by the Bund

der Landwirthe of Berlin to draw up an explanation of these gambling produce operations, for circulation among German agriculturists, and in the German press.—North British Agriculturist.

### AN IMPROVED "VISIBLE SUPPLY."

Many merchants in the grain trade entertain the idea that what is known as the "official visible supply" of grain has lost much of its usefulness as a factor in the grain markets, for the reason that it does not represent the grain actually in store at the points named—only that in the warehouses containing grain deliverable on contracts for future delivery. Other points which have a much larger grain trade than some of the points named are omitted. For instance, Cleveland, Newport News, Nashville, Memphis, New Orleans, Galveston, Denver, Omaha, San Francisco, Portland, Tacoma, Seattle, Winnipeg and Fort William generally have fair quantities of wheat on hand—fully as much as Albany, Cincinnati, Indianapolis, Montreal, Oswego, Peoria or Toronto, which are included. With possibly the exception of Toledo, all the grain in private warehouses is excluded, probably reaching an aggregate of 10,000,000 to 12,000,000 bushels, which is regularly dealt in by members of the leading commercial organizations, and which is reported in the receipts and shipments. The new year ought to witness an "improved visible supply of grain" to more generally meet the wants of the trade, and Chicago ought to lead in the improvement.—Trade Bulletin, Chicago.

### LOCATIONS FOR FACTORIES.

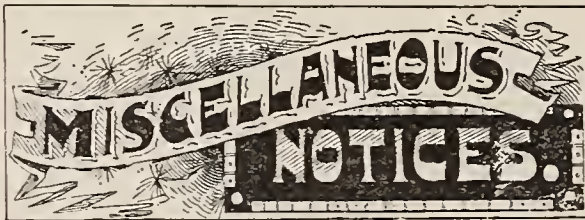
The name of the Chicago, Milwaukee & St. Paul Railway has long been identified with practical measures for the general upbuilding of its territory and the promotion of its commerce, hence manufacturers have an assurance that they will find themselves at home on the company's lines.

The Chicago, Milwaukee & St. Paul Railway Company owns and operates 6,150 miles (9,900 kilometers) of railway, exclusive of second track, connecting track or sidings. The eight states traversed by the lines of the company, Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota, possess, in addition to the advantages of raw material and proximity to markets, that which is the prime factor in the industrial success of a territory—a people who form one live and thriving community of business men, in whose midst it is safe and profitable to settle. Many towns on the line are prepared to treat very favorably with manufacturers who would locate in their vicinity.

Mines of coal, iron, copper, lead and zinc, forests of soft and hard wood, quarries, clays of all kinds, tanbark, flax and other raw materials exist in its territory in addition to the vast agricultural resources.

A number of new factories have been induced to locate—largely through the instrumentality of this company—at towns on its lines. The central position of the states traversed by the Chicago, Milwaukee & St. Paul Railway makes it possible to command all the markets of the United States. The trend of manufacturing is westward. Nothing should be permitted to delay enterprising manufacturers from investigating. Confidential inquiries are treated as such. The information furnished a particular industry is reliable. Address

LUIS JACKSON,  
Industrial Commissioner, C., M. & St. P. R'y,  
425 Old Colony Building, Chicago, Ill.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

### ELEVATOR PROPERTY FOR EXCHANGE.

Will exchange well-located Illinois elevator property for Iowa elevator. Address

ILLINOIS, care "American Elevator and Grain Trade," Chicago, Ill.

### ELEVATOR WANTED.

I want to lease an elevator for a term of years, in Central or Northwestern Illinois. Address

C. A., care "American Elevator and Grain Trade," Chicago, Ill.

### ILLINOIS ELEVATOR WANTED.

I want to lease an elevator for a term of years, on a Chicago road, in Central Illinois. Address  
D. A., care "American Elevator and Grain Trade," Chicago, Ill.

### MANAGER WANTED.

We are in need of a good, competent man to take the management of a first-class grain receiving elevator. Must be well recommended and able to give bond. Address

RECEIVING ELEVATOR, care "American Elevator and Grain Trade," Chicago, Ill.

### DAVIS' GRAIN TABLES.

The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels, is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address

E. D. DAVIS, 610 Nicollet Ave., Minneapolis, Minn.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

### GRAIN ELEVATOR FOR SALE.

Steam power grain elevator, on Chicago & Alton Railroad, in Missouri, for sale. Convenient to Chicago, St. Louis and Kansas City. Corn sheller, scales, office, etc., complete. Splendid grain country; finest corn crop this season ever known. Very healthy location. Now in operation and rented to good advantage. Address

ELEVATOR, Mt. Leonard, Mo.

### THREE ELEVATORS AND CRIBS.

Three elevators in corn section of Illinois for sale. Combined capacity of three, including ear corn cribs, 170,000 bushels. Very favorable railroad rates. Good lumber business in connection. Will give immediate possession. Address

ELEVATORS, care "American Elevator and Grain Trade," Chicago, Ill.

### OAT CLIPPER.

For Sale—A Howe Oat Clipper and Cleaner (can be used for cleaning alone). It is a good machine, in No. 1 order and good as new. Have put in larger machine. Write for full particulars. Address

T. E. MALDEN, Manson, Iowa.

### GRAIN AND IMPLEMENT BUSINESS.

Grain and implement business in Central Illinois for sale. No competition. Elevator with corn crib and sheller. Handled 250 cars last season; sold 135 buggies the past season. Pays yearly profit of price asked for it. Good reasons for selling. Address

Z., care "American Elevator and Grain Trade," Chicago, Ill.

### ILLINOIS GRAIN BUSINESS.

For Sale—One grain elevator, complete, 100,000 bushels' capacity; cribs for ear corn, 80,000 bushels' capacity. Also with the above one store with living rooms, and coal business. Located in Central Illinois. This is a bargain. Price \$35,000. Not for trade, but is offered for cash. For further particulars address

L., care "American Elevator and Grain Trade," Chicago, Ill.



SEND ORDERS FOR  
**COAL**  
 COKE  
 TO MILES & COMPANY,  
 MINE AGENTS AND SHIPPERS PEORIA, ILL.

HARD  
SOFT  
BLOCK  
BLACK-  
SMITH

Best Grades  
Best Prices.  
Best Deliveries

## TO POULTRY RAISERS.

*The Complete Poultry Manual* is a neat little work which is well worth reading by those interested in poultry, or by boys or girls who want to turn an honest penny. The price is only 25 cents. Sent postpaid on receipt of price. Address

**MITCHELL BROS. CO.,**  
 184 Dearborn Street, Chicago, Ill.

## COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucket-shop keeper or irresponsible dealer.]

## CHICAGO BOARD OF TRADE.

As many complaints are coming to the Chicago Board of Trade showing that persons intending to deal in grain and provisions through members of the Board, and subject to its rules and regulations, are misled into dealing with persons or firms who have no connection with this Board, the public is cautioned against dealing with such persons or firms, and is notified that GEORGE F. STONE, Secretary, will answer any inquiries as to whether any particular person or firm is a member of such Board.

GEORGE F. STONE, Secretary.

## Killpatrick, Lucas & Co.

GRAIN AND HAY.

REFERENCES: Advances on Bill of Lading.  
 Girard National Bank, Phila. Market reports furnished free.  
 John Lucas & Co., Chicago. Correspondence solicited.

Philadelphia, Pa.

## E. P. MUELLER,

Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Particular attention paid to the shipments  
 of mixed car lots.

860 Calumet Bldg., 189 La Salle St., CHICAGO,

Will pay the highest prices for Wet and Dried Brewers' Grains, Dried Distillers' Slops, Starch Feed, Damaged Wheat, Hominy Feed and Barley Sprouts under yearly contracts  
 Write for estimates F. O. B. cars your city.

## ACCOUNTS OF GRAIN DEALERS

OR ORDERS FOR

## Speculative Investments

On the CHICAGO BOARD OF TRADE SOLICITED.

Call at our office or write for private Cipher Code or Shippers Grain Record.

**MCLAIN BROS. & CO.,**

RIALTO BUILDING, CHICAGO.

## E. R. Ulrich & Son,

SHIPPERS OF

## WESTERN GRAIN,

ESPECIALLY

High Grade White and Yellow Corn.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., O., P. & St. L. Ry., and St. L., O. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building,  
 SPRINGFIELD, ILLINOIS.

Write for Prices Delivered.

## COMMISSION CARDS.

### Martin D. Stevers & Co.

Commission Merchants,

218 LA SALLE STREET, - CHICAGO.

We make a specialty of selling by sample

Barley, Wheat, Rye, Oats, Corn, Flax and Timothy Seed.

Grain, Seeds and Provisions for future delivery  
 bought and sold on margins.

### E. L. ROGERS & CO.,

ESTABLISHED  
1863.

COMMISSION  
MERCHANTS,

GRAIN, Flour, Seed, Hay and Straw.

135 S. Second St., (Chamber of Commerce) PHILADELPHIA, PA.

Liberal advances made on consignments. Market reports furnished  
 gratuitously on application. Correspondence solicited.

References: { Corn Exchange National Bank.  
 Manufacturers National Bank.  
 Merchants National Bank.

## COLLINS & Co.,

STRICTLY COMMISSION

Grain, Hay and Mill Feed.

## CINCINNATI, OHIO.

Established 1879.

## LEDERER BROS.,

GRAIN and SEED,

Commission Merchants,

214 and 216 Patterson St., - - Baltimore, Md.

We give careful attention to every shipment. Are always prepared to make cash advances on consignments. We make a specialty of handling spot goods, which we either sell after arrival or hold, if requested. We solicit your trade, as we do a strictly commission business.

References: Merchants' National Bank, Baltimore, Md., and the Commercial Agencies.

LEMAN BARTLETT.

O. Z. BARTLETT.

## L. Bartlett & Son,

GRAIN AND PRODUCE  
COMMISSION MERCHANTS.

## BARLEY A SPECIALTY.

Room 23 Chamber of Commerce Bldg.  
 Milwaukee, Wis.

Careful attention given to orders from Brewers, Maltsters and Millers.

## Robert McKnight & Sons,

COMMISSION MERCHANTS

AND DEALERS IN

GRAIN, FEED AND HAY,

2106 and 2108 Market Street, - PHILADELPHIA.

REFERENCES: { Merchants' and Third National Banks,  
 PHILADELPHIA.

W. F. JOHNSON.

F. J. SCHUYLER.

## W. F. JOHNSON & CO.,

Grain, Seed and Provision

## COMMISSION MERCHANTS

Room 59 Board of Trade, CHICAGO.

Rooms 406-408 Corn Exchange, MINNEAPOLIS.

Room 317 Chamber of Commerce, ST. LOUIS.

Room 23 Chamber of Commerce, MILWAUKEE.

Address all Correspondence to and make all Drafts on Chicago.

## COMMISSION CARDS.

J. J. BLACKMAN.

G. W. GARDINER.

## J. J. Blackman & Co.,

COMMISSION MERCHANTS,

WHEAT, CORN, OATS, BRAN, MIDDINGS, SCREENINGS, HAY,  
 SEEDS, BEANS, PEAS AND CORN GOODS.

95 Broad Street, Rooms 604 and 605, - NEW YORK.

## Mohr-Holstein Commission Co.,

GRAIN AND PRODUCE  
COMMISSION MERCHANTS,

BARLEY, WHEAT AND SEEDS

SPECIALTIES.

Room 29, Chamber of Commerce.

Milwaukee, Wis

Branch Houses: Chicago and Minneapolis.

## S. W. FLOWER & CO.,

GRAIN AND SEEDS,

—TOLEDO, OHIO.

Specialties—Clover, Timothy and Alsike. Correspondence Solicited.

## D. G. Stewart,

GRAIN AND COMMISSION.

Proprietor IRON CITY GRAIN ELEVATORS.

Capacity, 300,000 Bushels.

LIBERAL ADVANCES ON ALL CONSIGNMENTS.

CORRESPONDENCE SOLICITED.

OFFICE, 1019 Liberty Street, - PITTSBURGH, PA.

ESTABLISHED 1871.

S. T. EDWARDS.

E. J. LOOMIS.

F. W. EDWARDS.

## S. W. Edwards & Son,

ESTABLISHED 1870.

HAY, GRAIN AND FEED,  
COMMISSION MERCHANTS.

Office and Warehouse,  
 110-120 N. Elizabeth Street, Chicago.

REFERENCES: { Union National Bank, Chicago, and  
 Dun's Mercantile Agency.

We are members of the Board of Trade and have salesmen at the  
 principal railroad yards.

H. B. SHANKS.

Established 1873.

S. H. PHILLIPS.

## Shanks, Phillips & Co.,

COMMISSION MERCHANTS,

HAY, CORN, OATS, BRAN, CHOPS, FLOUR AND CORN MEAL.

306 Front St., Memphis, Tenn.

Refer to Union and Planters' Bank.

Cash advances on B. of L.



**F. H. PEAVEY & CO.,**

Minneapolis,

GRAIN RECEIVERS.

Consignments Solicited.

MILLING WHEAT A SPECIALTY.

## SHIP YOUR GRAIN

—TO—

## P. B. & C. C. MILES,

COMMISSION MERCHANTS,

PEORIA, ILL.

Established 1875.

LIBERAL ADVANCES  
QUICK RETURNS.

REFERENCES:—Commercial Nat. Bank, Peoria Savings, Loan &  
 Trust Co., Peoria.



**COMMISSION CARDS.****GEO. N. REINHARDT & CO.,**

Melrose Station, New York City.



We sell on Commission and buy direct.

**HAY, GRAIN AND FEED.**Storage capacity, 8,000 bales, 30,000 bushels.  
Let us know what you have to offer.**ROOFING AND SIDING.**

Standing Seam Steel, Corrugated Iron, Metal Shingles, Felt Roofing.

**ELEVATOR AND MILL IRON SIDING A SPECIALTY.****Kansas City Metal Roofing  
and Corrugating Co.,**

416 Delaware St., KANSAS CITY, MO.

**A DURABLE ROOFING.****DURABLE—EASILY APPLIED.**

This roofing is manufactured from natural Trinidad asphalt materials, and will not dry up and become brittle under exposure to the weather as coal tar roofings do. Send for free sample of roof 12 years old, with circular and price list, to

**WARREN CHEMICAL & MFG. CO.,**  
56 Fulton St., New York, U. S. A.**JAMES A. MILLER & BRO.,**

129 and 131 South Clinton Street, CHICAGO,

**Corrugated Iron Roofing and Siding**

Material Only or put on Complete.

Special pains are taken to get out these materials so they can be cheaply put on and make a good job.

**ROOFING  
SLATE****JAS. L. FOOTE,**  
Manager.

SLATINGTON, PA.

Write for New Slate Manual and Price List.

**STEEL ROOFING AND SIDING.**

Established 1872.

**SCOTT & CO.,**

75 East Front Street, CINCINNATI, OHIO.

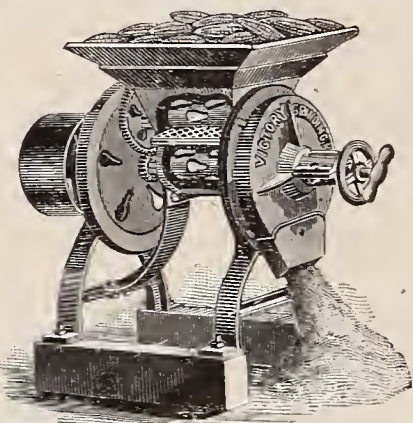
**FOR MILLS AND ELEVATORS.—We pay the freight.****Gutta Percha Roofing.**

Absolutely fire proof paper sheathing—particularly adapted for elevators. Send for illustrated catalogue.

**EMPIRE PAINT ROOFING CO., 221 N. 4th St., Philadelphia, Pa.**

Wire Edge. Lock Joint.

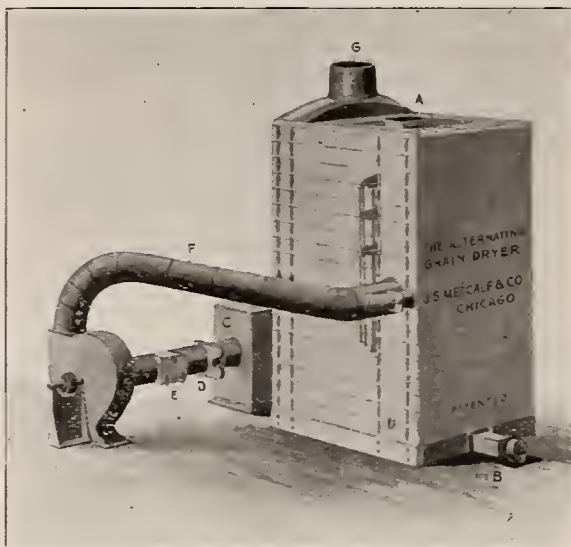
For Flour, Grist Mills and Elevators.

**VERMIN PROOF.****VICTORY FEED MILL.**Made in four sizes for 2, 4, 8 and 10 horse power, 10 to 50 bushels per hour. Especially adapted to grinding ear corn, shelled corn, wheat, oats, rye, cotton seed, e.c. Oldest and best grinding mill made. Ask for prices and discounts. Manufactured by **THOMAS ROBERTS**, Springfield, Ohio.**The Scientific  
Bean Pickers**For sorting or hand-picking stand  
at the head.  
Simple, easy to operate and rapid.**MILLER BROS.,**

Rochester, - Michigan.

**Found! • Found!  
A PERFECT GRAIN DRYER.**

Wet or Damaged Grain Restored to Grade.

Will  
make  
you from  
10 to 50  
per cent.  
profit.We  
guarantee  
what  
we  
claim.

Write for Descriptive Circular.

**JOHN S. METCALF & CO.**Engineers,  
Grain Elevator Builders,

1075 WEST 15th STREET, - CHICAGO.

**An Offer to Hay and Grain Men.****THE AMERICAN ELEVATOR AND  
GRAIN TRADE,**

\$1.00 PER YEAR.

Monthly.

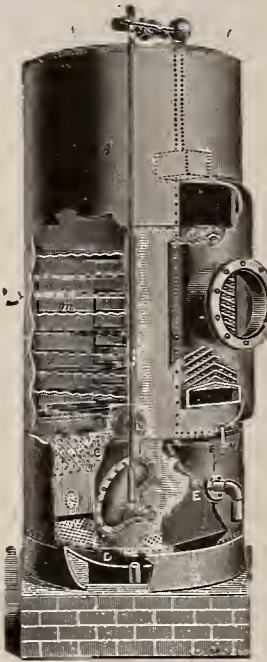
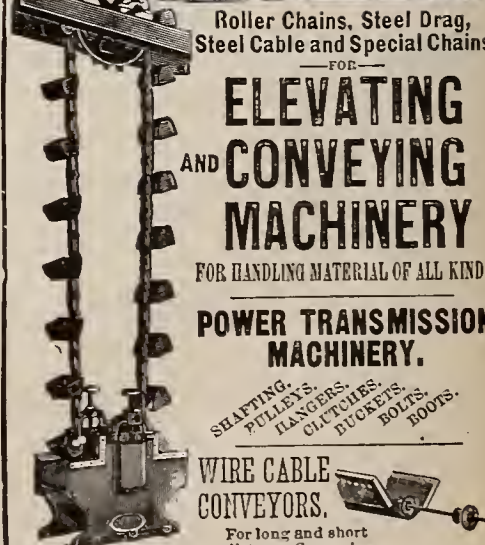
**THE HAY TRADE JOURNAL AND  
DIRECTORY,**

\$2.00 PER YEAR.

Weekly.

**BOTH FOR \$2.00.**

ADDRESS EITHER

**The Hay Trade Journal,**  
Canajoharie, N. Y.**Mitchell Bros. Co.,**  
184 and 186 Dearborn St., Chicago, Ill.**STILWELL'S  
PATENT IMPROVED.**Lime Extracting  
Heater.  
Uses Exhaust  
Steam.  
Separates the Oil  
from the  
Steam and Water.  
It Regulates  
the Feed.  
The Pipes Never  
Pound.  
Prevents Scale in  
Steam Boilers.  
Removing  
all Impurities from  
the Water  
Before it Enters  
the Boiler.**THOROUGHLY  
TESTED.****Over 4,500****OF THEM  
IN  
DAILY USE.****Illustrated  
Catalogue  
Free.****The Stilwell-Bierce & Smith-Vaile Co.**  
DAYTON, OHIO.Roller Chains, Steel Drag,  
Steel Cable and Special Chains**ELEVATING  
AND CONVEYING  
MACHINERY**

FOR HANDLING MATERIAL OF ALL KINDS

**POWER TRANSMISSION  
MACHINERY.**SHAFTING,  
PULLEYS,  
HANGERS,  
CLUTCHES,  
BUCKETS,  
BOOTS.**WIRE CABLE  
CONVEYORS.**For long and short  
distance conveying.**THE JEFFREY MFG. CO.** 163 Washington St.  
Columbus, Ohio. NEW YORK.  
Send for Catalogue.

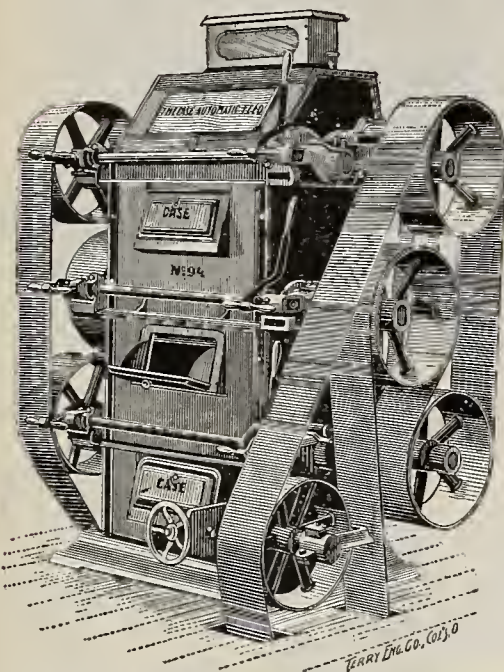


## ELEVATOR MEN,

Who put in a ROLLER FEED MILL last season, found it a profitable investment. Some Roller Feed Mills put in by elevator men have more than paid for themselves in one season. The demand for ground feed during the coming season promises to be even greater than during the last.

### The Case Three-Pair High Corn and Feed Roller Mills

Are made in four sizes, and always do perfect work.



ONTARIO, IND., April 8, 1895.

The Case Manufacturing Co.,  
Columbus, Ohio.

DEAR SIR:—We have the 9x18 Three-High roll running, and it is the best Feed Roll that I ever handled or seen. We can grind 60 to 65 bushels per hour with less than half the power that we used with the old stone.

She is a daisy. We have smiles all over our faces like a full moon. Now, if you want a statement regarding the roll, let me know, and will write you a good one. Everything all O. K.

Yours respectfully,

M. S. MILLER.

WE KEEP A FULL LINE OF

Elevator and Mill Supplies  
AND MACHINERY.

Grain Cleaners, Corn Shellers, Corn Cleaners and Scurers.

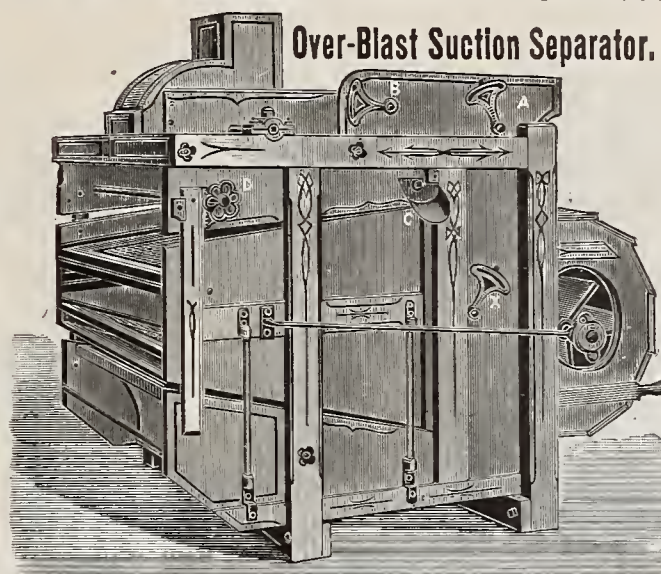
CORN MEAL BOLTS.

WRITE US FOR PRICES BEFORE BUYING.

**THE CASE MFG. CO., Columbus, Ohio.**

THE CELEBRATED

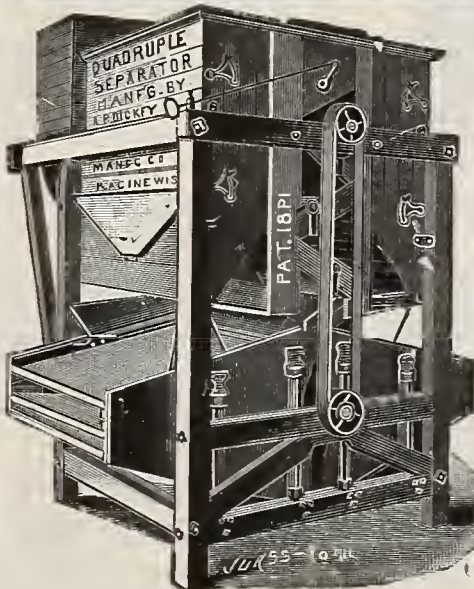
## A. P. DICKEY GIANT GRAIN CLEANERS.



THE  
STANDARD  
IN THEIR  
LINE.

"Grain  
Cleaned  
to a  
Standstill."

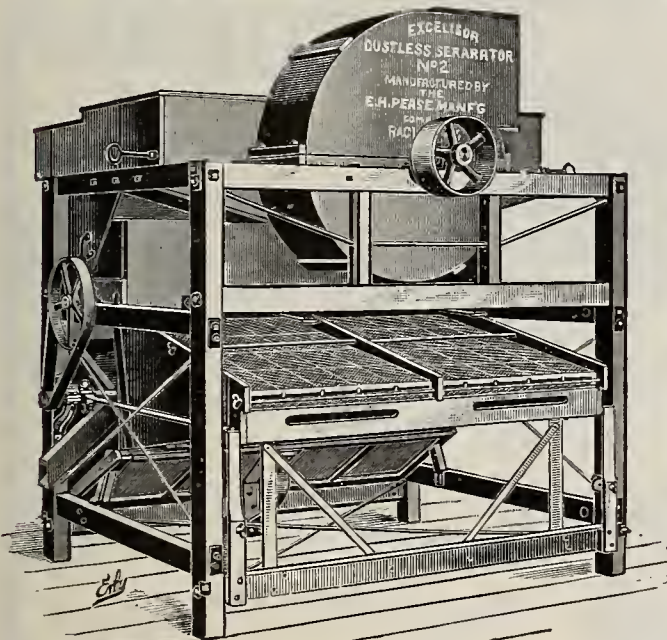
Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over-Blast.



The Quadruple Suction Dustless Separator. Four separate suctions, independent of each other with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnished with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

For CIRCULARS and PRICES address

**A. P. Dickey Mfg. Co.**  
RACINE, WIS.



## The Improved Excelsior Dustless Separator.

FOR ALL KINDS OF GRAIN AND SEED.

THE MACHINE that can clean any kind of grain or seeds to a given standard with a given amount of power, and once through the machine, in any better shape than this one, does not, nor ever did, exist. Adopted and placed in twenty of the largest Governmental elevators of Russia in 1895. Made in different sizes for country elevators or largest cleaning houses. They are built strong and of the best materials. The shoe is counterbalanced; the journals run in high grade Babbitt metal; the Pitman boxes are brass, and the Pitman rods are spring steel.

The sieve surface is large, and the sieves and screens are so arranged that combinations of sieving can be easily put in to suit any class of work.

The fan is capable of moving a very large volume of air, and each of the air currents are under the immediate and absolute control of the operator.

The grain is spouted into a hopper at about the center of the machine; from this hopper the grain is distributed the entire length of a long hopper, which is directly above the shoe. In this long hopper is placed the force-feed device, which is the same as is used on our "Excelsior" Combined Grain Machine. From the hopper the force-feeding device forces an even and steady flow of grain onto the sieves across their entire width. As the grain falls, in a thin sheet, from the hopper to the sieves, it is subjected to the first current of air, which current separates the greater portion of the dust, light impurities, straws, etc. After passing through the sieves which separate the coarse foreign substances, the grain flows over the screens which separate the cockle, small seeds, sand, etc. The grain is then discharged into the main or back air trunks, where a final and complete separation is made and the grain is discharged from the machine in perfect condition.

FOR FULL PARTICULARS SEND FOR OUR CATALOGUE.

**E. H. PEASE MFG. CO., - RACINE, WIS.**

CORN IS CHEAP. BUY IT.  
CRIB IT IN

## ADAM'S Portable Corn Crib



Pat. June 27, 1893.

Improved for 1895.  
Cheap, practical, convenient.  
Capacity from 500 to 2,000 bushels.  
The only complete Crib manufactured.  
No tools needed in erecting it.  
Send for delivered prices.

W. J. ADAM, = Joliet, Ill.

DO YOU  
NEED

## The Best Feed Grinder on Earth,

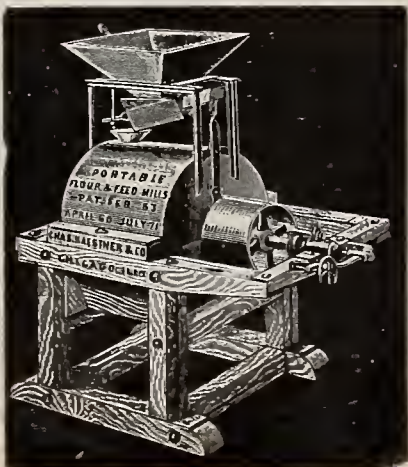
AT PRICES THAT DEFY COMPETITION?

If so, write to

**CHAS. KAESTNER & CO.**

ENGINES, BOILERS, PUMPS,  
POWER MACHINERY,

CHICAGO, ILL.



Akron, Ohio. The American Cereal Co. New York City, 55-57 N. Moore St.  
Chicago, Ill. Manufacturers of Boston, Mass.  
Cedar Rapids, Ia. OATMEALS, 501 Cham. Commerce.  
Flour and Cereal Products. Philadelphia, Pa., 5 S. Front St.

CHICAGO, ILL., August 1, 1895.

MESSRS. CHARLES KAESTNER & CO.  
Gentlemen:—Yours of the 30th received, and in reply would say that we have been using the Kaestner Mill for the past fifteen years. We think they are the best mill in the market. We have twelve of them in use at present. Yours truly,

THE AMERICAN CEREAL CO.,  
GEORGE STUART, Sept.

## The Bristol Counter



Registers an accurate account of work done on any machine, grain tallies, fraction tallies, 4, 5 and 6 figures. Send for circular.

C. J. ROOT, Bristol, Conn.

## DUST! DUST!



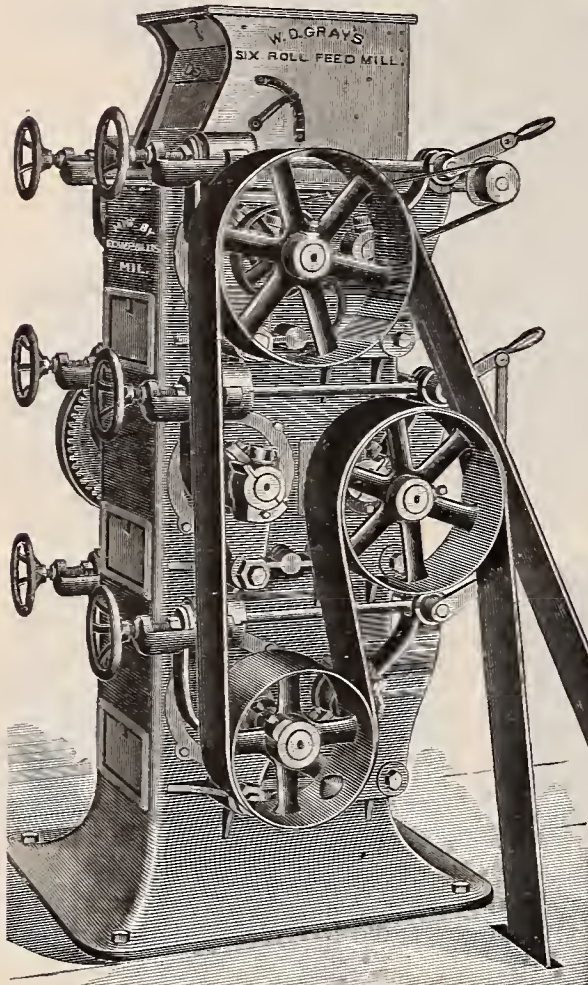
Gibbs' Patent Dust Protector protects the nose and mouth from inhalations of poisonous dust; invaluable in mills, elevators and every industry where dust is troublesome. Perfect protection with perfect ventilation. Nickel-plated protectors \$1, postpaid. Circulars free. Agents wanted.

Gibbs Respirator Co.,  
30-36 La Salle Street, - CHICAGO



# HUNDREDS OF MILLERS

USE A FEED MILL LIKE THIS,  
AND THIS IS WHAT THEY THINK OF IT:



MANUFACTURED BY

THE EDWARD P. ALLIS CO., - Milwaukee, Wis.

"We got fooled once in buying a cheap, light Feed Mill, but since we got the Allis Feed Roll we are happy once more."

"Your Feed Mill grinds sixty-five bushels of fine meal per hour with fifteen-horse power."

"The farmers now say, 'Grind it a little coarser this time.' With my old feed mill I could never grind fine enough to suit them."

"We ground a car of 650 bushels, sacked it, and put it back in car, all in five hours."

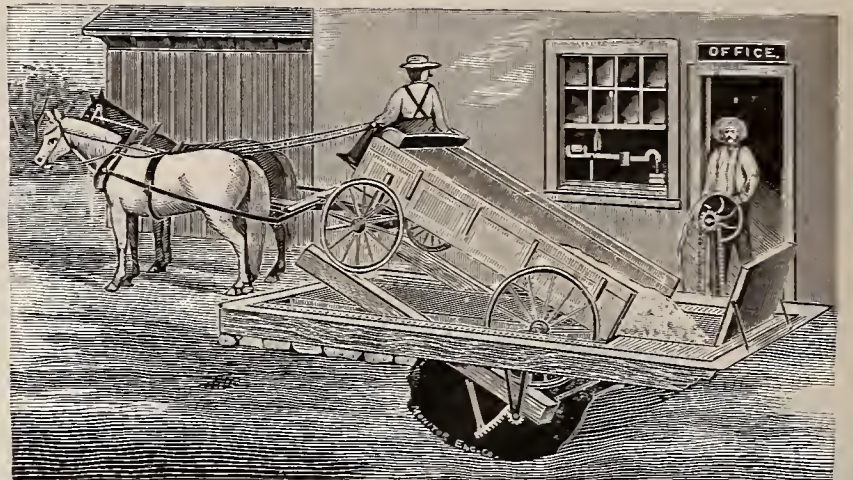
"Our new Allis Feed Mill is paying for itself at the rate of \$4 per hour."

"I astonish the farmers with my Allis Feed Mill, for as soon as their corn is unloaded it is ground and ready to load back in their wagon."

"We advise any man wanting a Feed Mill to buy the Allis make."

"I have run several different makes of Feed Mills, but none grinds so fast and so fine, and gives so little trouble as the Allis."

# Savage & Love's



## PATENT WAGON DUMP

The only dump made that is always under the complete control of operator.

LINDENWOOD, ILL., July 7, 1895.

SAVAGE & LOVE CO., Rockford, Ill.

GENTLEMEN:—I have used your Wagon Dump for unloading grain in my elevator, and can only say that it gives entire satisfaction. I can dump a hundred bushel load of grain easily, throwing the dump clear down, or only part way, as I choose. I have used it constantly for six years, have not had a cent of repairs and it is in as good condition as when put in. I would not have any other dump that I have seen.

Yours truly,

C. E. PERRY.

MANUFACTURED ONLY BY

THE SAVAGE & LOVE CO., Rockford, Ill.

FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.

## THE SMITH PNEUMATIC TRANSFER AND STEEL STORAGE SYSTEM.

*Now in Successful Operation at Toledo, Ohio.*

This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

It is fully protected by 20 patents already issued, and others pending, in the United States and principal foreign countries.

It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

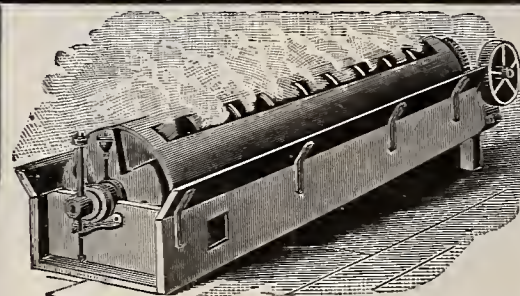
The policy of the Company in regard to the introduction of its system is to make such liberal and easy terms with all who desire to use it that there will be no cause for complaint.

Full particulars furnished on application in person or by letter to

**The Smith Pneumatic Transfer & Storage Co.**

1327 MANHATTAN BUILDING,

315 DEARBORN ST., CHICAGO.

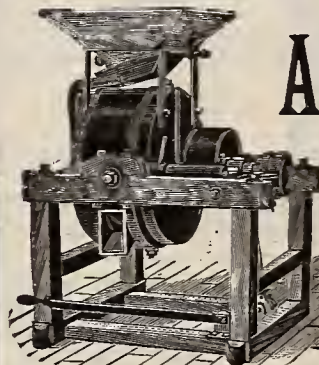


## STEAM DRYER

For Cornmeal, Hominy, Buckwheat, Rice, and all kinds of Cereal Products; also Sand, Coal dust, etc.

Drying Cylinder made entirely of iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

USED AND RECOMMENDED BY LARGEST AND BEST MILLS.



## Automatic Adjustment Mill.

The adjustment is positive and automatic, utilizing every part of the grinding surface. Can be started or stopped at pleasure, without stopping the power. Is dressed without taking the shaft out of its boxes, or the belt off the pulley.

Comprises all Recent Improvements for Producing Goods at Lowest Cost.

SEND FOR CIRCULAR.

THE CUTLER CO., North Wilbraham, Mass.

## MINNEAPOLIS IRON WORKS

D. M. GILMORE, Prop.,

MACHINIST AND BOILERMAKER.

Examine the merits of our

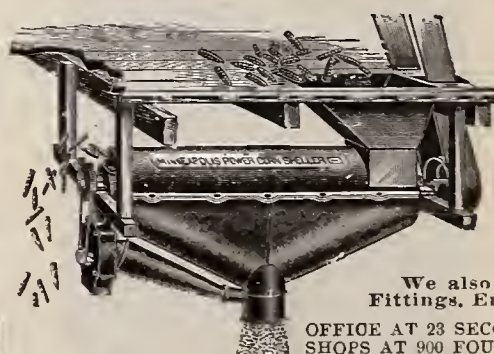
Minneapolis Power Corn Sheller

If you want the best.

Length, 5 feet 3 inches; width, 2 feet 4 inches; driving pulley, 9 1/2 x 6 inches; revolutions per minute, 600 to 800; capacity in bushels, per hour, 100 to 125; weight, 450 pounds. Can also be set up in frame to stand on the floor.

We also supply Grain Elevator Machinery, Pipe Fittings, Engineer's Supplies, Etc.

OFFICE AT 23 SECOND STREET NORTH, Minneapolis, Minn. SHOPS AT 900 FOURTH STREET SOUTH,



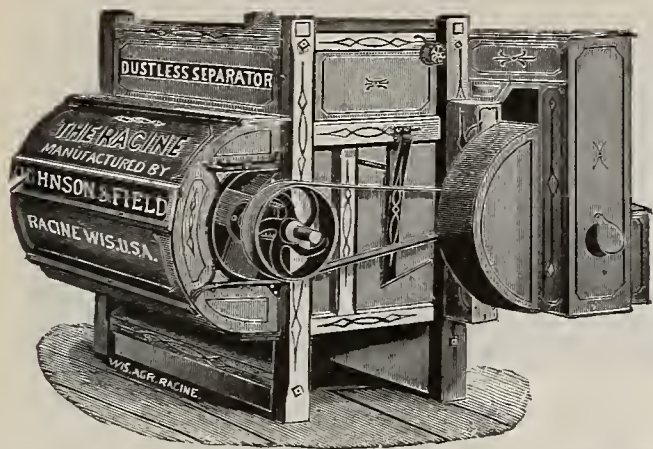


# "THE RACINE" DUSTLESS GRAIN SEPARATOR

Embodies More Points of Excellence

Than any other machine offered for similar purposes, and is **Light Running, Large in Capacity, Perfect in Separation** and with **Great strength and Durability**. These machines have no equal. Adopted and indorsed by many of the largest Mills and Elevators in the country.

Made in Different sizes to meet different requirements.



## THE RACINE HEAVY WAREHOUSE MILL

Is especially adapted for horse power use, is supplied with **Patent Governor Pulleys**, has an even and steady speed, is built extra heavy, and bolted throughout. This machine has large capacity and is more durable than any other Warehouse Mill made.

Send for our catalogue and prices before placing your orders.

IMPROVED GASOLINE ENGINE.

Oil and Steam Engines from 1 to 100 Horse Power.

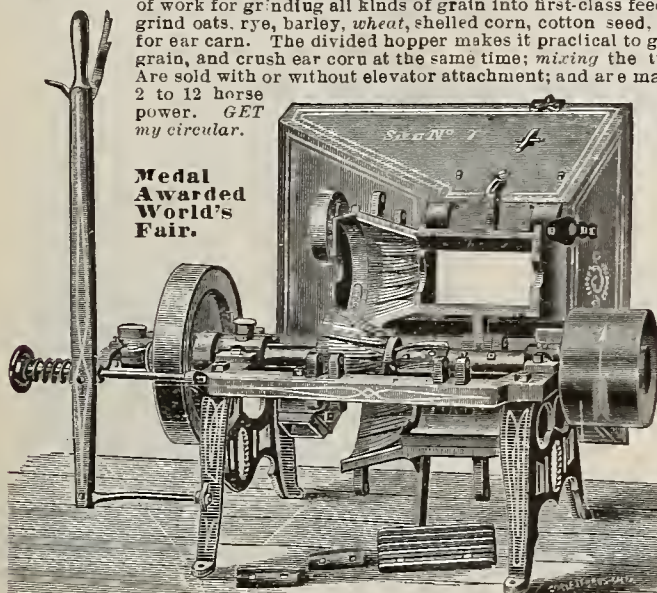
Elevator Machinery and Supplies,

Scales, Warehouse Trucks, Elevator Boots, Buckets and Bolts, Pulleys, Shafting, Belting, Grain Spouts, Etc

**JOHNSON & FIELD COMPANY, RACINE, WIS.**

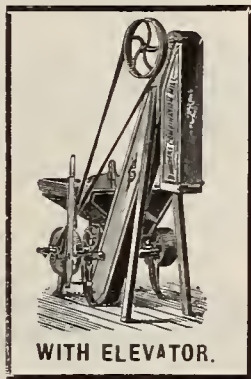
## THE BEST ALL-AROUND FEED MILL.

The conical burrs give large capacity with moderate power. Ahead of rolls or burrs in speed and quality of work for grinding all kinds of grain into first-class feed. Will crush corn and cob, and grind oats, rye, barley, wheat, shelled corn, cotton seed, oil cake, etc. Has self-feeder for ear corn. The divided hopper makes it practical to grind oats, wheat or other small grain, and crush ear corn at the same time; mixing the two in any proportion desired. Are sold with or without elevator attachment; and are made in three sizes, ranging from 2 to 12 horse power. GET my circular.



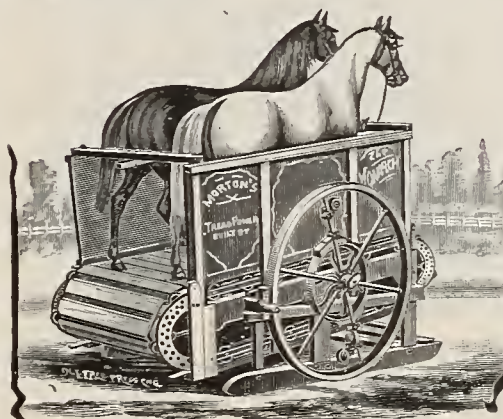
Medal Awarded World's Fair.

**N. P. BOWSER**  
South Bend, Ind.



WITH ELEVATOR.

## ELEVATOR HORSE POWERS.



*Cheapest, Most Efficient and Durable Power For an Elevator.*

PERFECTLY GOVERNED.

A Steady Motion.

No Skilled Help Required to Operate.

For Catalogue, Address

**MORTON MFG. CO.,**

MUSKEGON HEIGHTS, MICH.  
Or E. H. PEASE MFG. CO.,  
RACINE, WIS., Agents

At 1/4 Price

Gold and Silver Watches, Bicycles, Tricycles, Guns and Pistols, Cars, Buggies, Wagons, Carriages, Saws, Sleighs, Harness, Cart Tops, Skids,



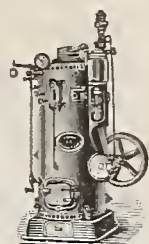
Sewing Machines, Accordions, Organs, Pianos, Cider Mills, Cash Drawers, Feed Mills, Stoves, Kettles, Bone Mills, Letter Presses, Jack Screws, Trucks, Anvils, Haycutters, Press Stands, Copy Books, Vises, Drills, Road Plows, Lawn Mowers, Coffee Mills, Lathes, Benders, Dump Carts, Corn Shellers, Hand Carts, Forges, Scrapers, Wire Fence, Fanning Mills, Winnowers, Engines, Saws, Steel Sinks, Grain Dumps, Crow Bars, Boilers, Tools, Bit Braces, Hay, Stack, Elevator, Railroad, Platform and Counter SCALES. Send for free Catalogue and see how to save money. 151 So. Jefferson St., CHICAGO SCALE CO., Chicago, Ill.

**KELLY**  
**DUPLEX**  
**GRINDING**  
**MILL**  
The O.S. KELLY CO.  
SPRINGFIELD, OHIO.  
Grind Corn, Cotton Seed, and all Grains  
Cob, Husks, Seed, etc.  
SIZES FROM  
4 TO 16 HORSE POWER  
Satisfaction Guaranteed  
Catalogue sent free



AT HOME

What a place to read! What a subject to read! It pays beyond almost anything else to spend a little time, at home, reading business law. You will also find it interesting, if you read it in the up-to-date Business Man's Law Journal—BUSINESS LAW. Plain and to the point, it is always brimful of money, time and trouble saving information. Try it 3 months for 25 CENTS. Address BUSINESS LAW, 112 Clark St., Chicago, Ill.



Steam Engines

and

Steel Boilers,

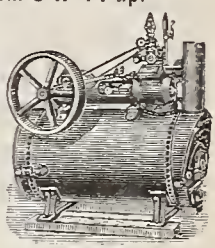
UPRIGHT AND HORIZONTAL,  
From 3 H. P. up.

For Elevator and Mill Work.

Send for pamphlet and state your wants to

**James Leffel & Co.**

Springfield, Ohio.



## PEASE WAREHOUSE FANNING MILLS

AND

PEASE DUSTLESS SEPARATORS

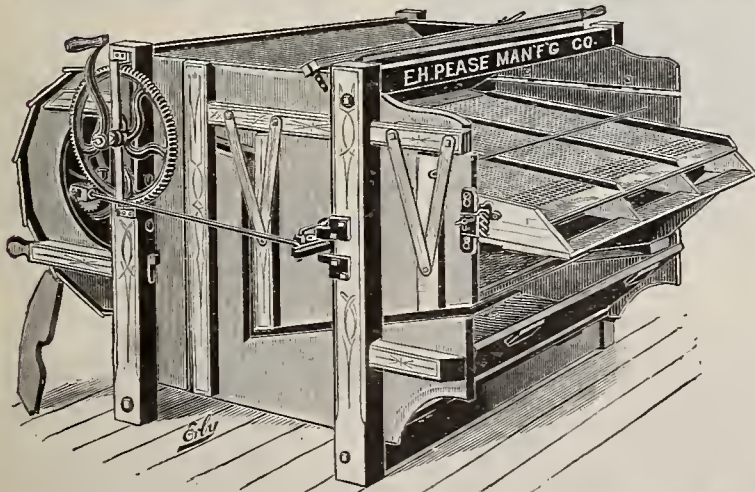
ARE THE RECOGNIZED...

**STANDARD**

GRAIN CLEANERS

OF THEIR CLASSES FOR ALL KINDS OF GRAIN AND SEEDS.

STRONGER BUILT,  
LIGHTER RUNNING,  
MORE EFFICIENT IN WORK  
AND IN EVERY WAY  
SUPERIOR TO ALL OTHERS.



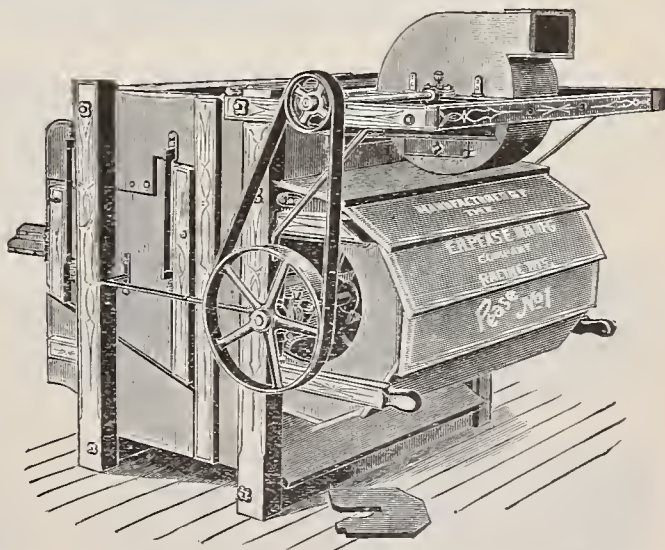
FOR HAND OR POWER USE.

SEND FOR OUR 220-PAGE GENERAL CATALOGUE OF ELEVATOR MACHINERY AND SUPPLIES.

FOR POWER ONLY.

**E. H. PEASE MANUFACTURING COMPANY**

RACINE, WIS.





# JAMES STEWART & CO.,

## ENGINEERS AND CONTRACTORS FOR

# Grain Elevators

RAILROAD WORK AND HEAVY STRUCTURES,  
ST. LOUIS AND BUFFALO.

Construction Department—Work in 1894\*

### GRAIN ELEVATORS:

1,000,000-bushel Elevator, with two Marine Elevating Towers, for the Coatsworth Estate, Buffalo, N. Y.  
150,000-bushel Storage Elevator for the Crescent Elevator Company, East St. Louis, Ill.  
750,000-bushel Storage and Cleaning Elevator for the Ryan Commission Company, St. Louis, Mo.  
100,000-bushel Elevator for the Indiana Distilling Company, Terre Haute, Ind.

### RAILROAD BUILDINGS:

Central Passenger Station, including long train shed, for the New York Central & Hudson River R. R. Co., Syracuse, N. Y.  
Twenty Stall Round House for the Cleveland, Cincinnati, Chicago & St. Louis R. R. Co., Mattoon, Ill.  
Power and Car Houses with Smoke Stack for the Syracuse Street Railway Co., Syracuse, N. Y.  
Passenger and Freight Station for the Louisville Evansville & St. Louis Consolidated Railroad Co. East St. Louis, Ill.  
Eight Stall Round House for the Baltimore & Ohio Southwestern R. R. Co., Cumminsville, Ohio.  
Warehouse 110x500 feet for the Erie & Western Transportation Co., Erie, Pa.

### RIVER AND HARBOR:

Terminal Dock 600x140 feet for the Erie & Western Transportation Co., Erie, Pa.  
River Incline for the Illinois Central R. R. Co., Mississippi River, above New Orleans, La.  
Dredging Slip 18 foot Channel, No. 1 Slip 150x400; No. 2 Slip 100x200 for the Erie & Western Transportation Co., Erie, Pa.  
Stone Arched Bridge for the Cataract Construction Co., Niagara Falls, N. Y.

### MISCELLANEOUS:

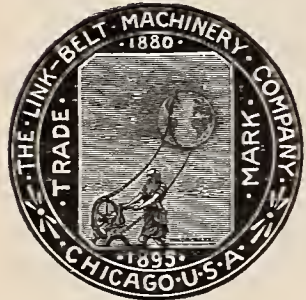
Office and Transformer Building for the Cataract Construction Co., Niagara Falls, N. Y.  
Distillery, 8,000 bushels' capacity, and Warehouses for George L. Woolsey, Terre Haute, Ind.  
50,000 Spindle Mill for the Pelzer Manufacturing Co., Pelzer, S. C.  
Cattle Barns, Capacity 3,000 head, for the Indiana Distilling Co., Terre Haute, Ind.

Just Contracted for 25,000 Spindle Mill for the Dwight Mfg. Co., Alabama City, Ala.  
Cattle Barns, 2,000 Head, for Indiana Distilling Co., Terre Haute, Ind.

## LINK-BELT MACHINERY CO.,

Engineers :: Founders :: Machinists

CHICAGO.



Shafting, Pulleys, Gearing,  
Shaft Bearings, Friction Clutches,  
Rope Sheaves, Manilla Rope,  
Rope Dressing, Grain Trippers,  
Grain Shovels, Car Movers,  
Wagon Dumps, Elevators and Conveyors, etc.

LINK-BELT ENGINEERING CO., Philadelphia and New York.

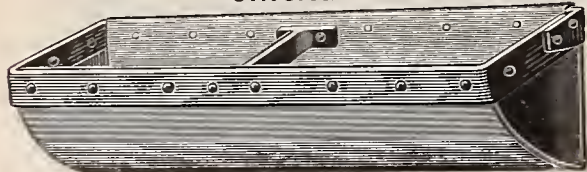
## BISULPHIDE OF CARBON,

Of Special Grade for Killing Insects in Warehouses, Etc.

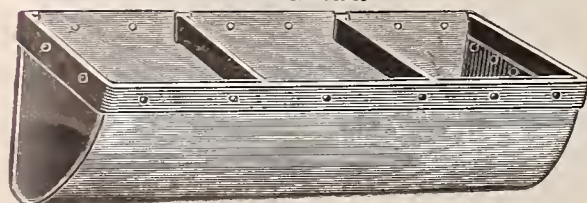
Send for Instructions and Order Direct from  
the Manufacturer,

**EDWARD R. TAYLOR,**  
CLEVELAND, OHIO.

"CHICAGO."



"NIAGARA."



**MOORE & LORENZ,**

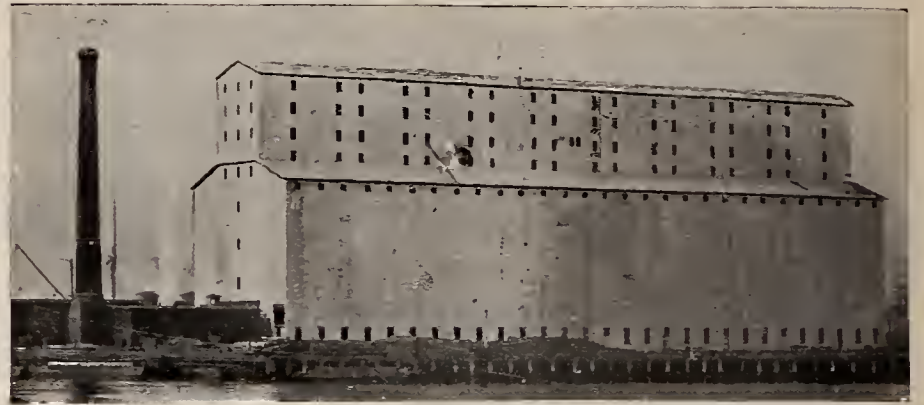
43 to 49 S. Canal Street,  
CHICAGO, ILL.,

### MANUFACTURERS:

Elevator Buckets,  
Bolts, etc.  
Mill and Elevator  
Supplies.

## SIMPSON & ROBINSON CO.

71-72 Commerce Building, CHICAGO.



Designers and Builders of

## GRAIN ELEVATORS, MALT HOUSES

And all Kinds of Heavy Construction.

Patent System of Independent  
Leg Rope Drive.

Patent Double-Jointed  
Distributing Spouts.

Patent Automatic  
Grain Belt Tripper.

## The Heidenreich Construction Co.,

ENGINEERS AND GENERAL CONTRACTORS,

DESIGNERS AND  
BUILDERS OF

## GRAIN ELEVATORS

OF ANY CAPACITY.

Malt Houses and Breweries.

541 The Rookery, Chicago, Ill.

C. M. SECKNER, President.

J. H. BROWN, Sec'y and Treas.

## THE SECKNER CONTRACTING CO.

Architects and Builders of

## GRAIN ELEVATORS

And General Contractors,

79-81 Dearborn St.,  
CHICAGO, ILL.

1234 and 1235 UNITY BLDG.

Telephone 5035 Main



## ONE CENT Per Hour is Cheap.

That is what "WEBER" GASOLINE ENGINES COST to run  
per H. P. Simple, Safe, Reliable, Economical. Get posted.

Address WEBER GAS & GASOLINE ENGINE CO., 482 Southwest Boulevard, Kansas City, Mo.

## WITTE GAS ENGINE WORKS

ADDRESS KANSAS CITY, MO. FOR CATALOGUE H



# TROMANHAUSER BROS.,

ARCHITECTS, CONTRACTORS, AND BUILDERS OF

## GRAIN ELEVATORS.



COUNTRY,  
TRANSFER,  
MIXING,  
MARINE,  
AND  
TERMINAL  
STORAGE  
ELEVATOR  
PLANTS.

Plans Submitted and Estimates Furnished.

315 New York Life Building, . . . MINNEAPOLIS, MINN.



WHEN YOU WANT  
Elevator or Mill  
Supplies,

Cleaning Machines,  
Feed Mills,  
Corn Shellers,  
Engines and Boilers,  
Horse Powers,

WRITE TO

## GREAT WESTERN MANUFACTURING CO.

General Office and Factory, LEAVENWORTH, KAN.  
Warehouse and Salesrooms, KANSAS CITY, MO., 1221-1223 Union Ave.

SEND FOR OUR ILLUSTRATED CATALOGUE.

## THE B. S. CONSTANT COMPANY,

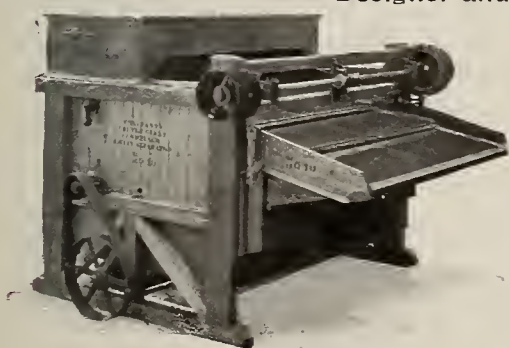
Designer and Builder of

### GRAIN ELEVATORS.

MANUFACTURER OF

Grain Cleaning Machinery  
FOR ELEVATORS AND MILLS.

Seed and Farm Fanning Mills.



Automatic Self-Feeding Ear Corn Elevator Boot and Sheller Feeder.

Our Elevator Cleaner collects all dust at the head of the elevator before the grain reaches the bins. It also removes the loose silk, shucks and snow out of ear corn and conveys it to the dust room.

Correspondence  
Solicited.

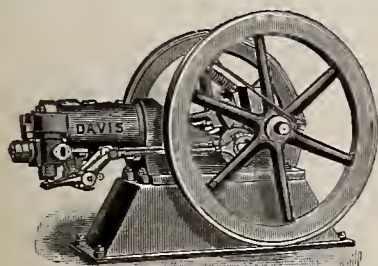
S. W. Cor. Douglas and Prairie Sts., Bloomington, Ill.

## DAVIS GASOLINE ENGINE

ALWAYS THE SAME.

Pronounced by experts the most scientific in principle. Hundreds of testimonials. Easily operated by any unskilled person; a steady, even power; gasoline direct from the tank.

John Deere Plow Co.,	Kansas City, Mo.
Mansur & Tebbetts Implement Co.,	St. Louis, Mo.
Linsinger & Metcalf Co.,	Omaha, Neb.
W. B. Holton Mfg. Co.,	Indianapolis, Ind.
Harber Bros. Co.,	Bloomington, Ill.
Deere & Webber Co.,	Minneapolis, Minn.
Beuzemaker Bros.,	Milwaukee, Wis.



Simplest Engine Built.

DAVIS GASOLINE ENGINE CO., - Waterloo, Iowa.

## Macdonald Engineering Company,

CONTRACTING ENGINEERS,

Builders and Designers of

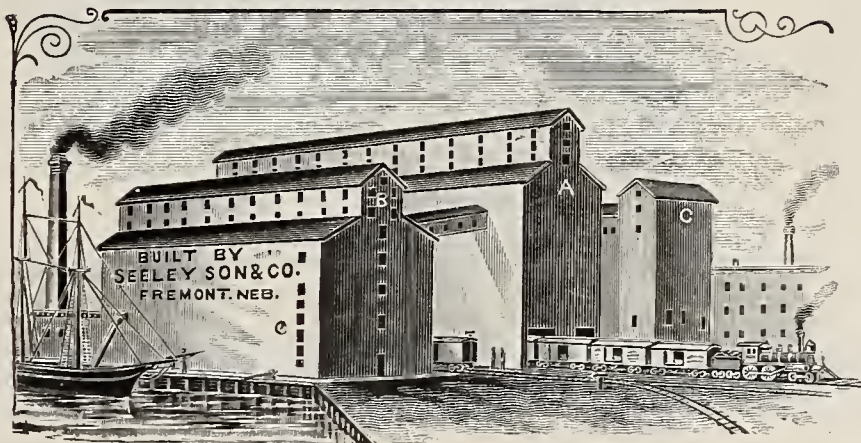
### GRAIN ELEVATORS

Any Capacity.

710 Medinah Bldg., Chicago, Ill.

## SEELEY, SON & CO.,

Fremont, Neb.



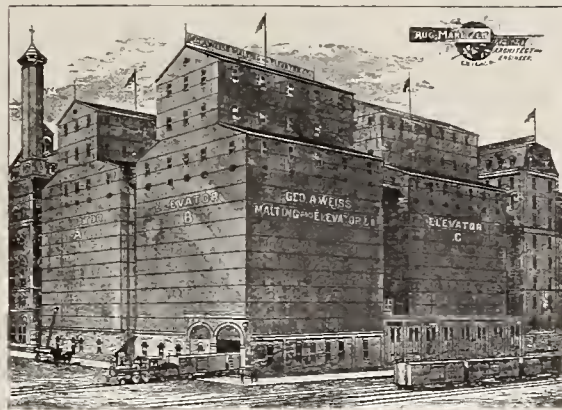
### Architects and Builders

OF ALL KINDS OF

## GRAIN ELEVATORS.

## A. Maritzen Company,

ARCHITECTS, ENGINEERS AND BUILDERS OF



### Grain Elevators, Breweries, Malt Houses and Distilleries.

Rooms 42 to 50, 177 La Salle St., Chicago.

## THE EASY PUSHER.

More Powerful than A TEAM OF  
HORSES or TEN MEN.

Does not lift, but PUSHES.

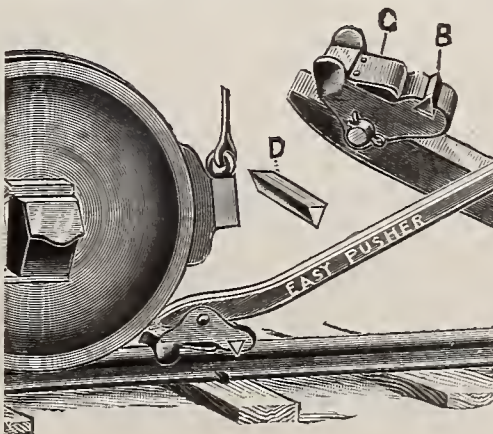
### WHY THE BEST

- 1—It will work on any track and under any brake.
- 2—It is very durable, and the parts that wear out can be replaced for a trifle.
- 3—It is strong, durable and convenient, and can be used by any person.
- 4—Nothing to break or get out of repair.
- 5—Rough, greasy, icy or wet rails do not affect it.
- 6—It can move twice as many cars as any other car moving device.

You take no chances—we send it on 30 days' trial, to responsible parties.

W. T. LAMOREAUX CO.,

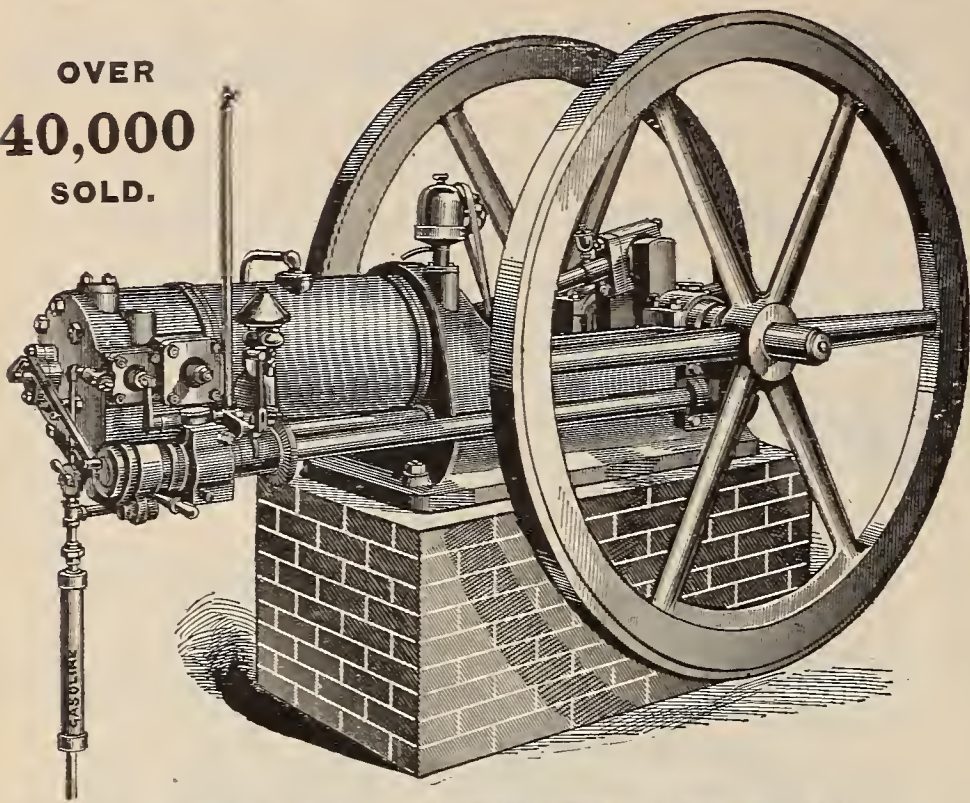
Price, \$5.00. GRAND RAPIDS, MICH.





# The Modern Wonder.

OVER  
40,000  
SOLD.



## OTTO GASOLINE ENGINE

WORKING WITHOUT BOILER, STEAM, ENGINEER,  
COAL, ASHES, OR DANGER.

2 Medals and 3 Diplomas at World's Columbian Exposition, making over 200 Medals and Diplomas in all.

Capacity of Works: 800 Engines per Year.  
Sizes: 2 to 120 Horse-Power.

Best and Cheapest Power for GRAIN ELEVATORS,  
FLOUR AND FEED MILLS, CONVEYORS, ETC.

### THE OTTO GAS ENGINE WORKS,

OFFICES: { Thirty-third and Walnut Sts., Philadelphia.  
245 Lake St., Chicago.  
35 E. Ohio St., Indianapolis.  
321 S. 15th St., Omaha.

**\$2.00 \$2.50 \$1.00**



PUBLISHED THE FIRST DAY OF EVERY MONTH.

ESTABLISHED IN 1873.

The Best Exponent of Modern Milling.

SUBSCRIPTION PRICE,

**\$2.00 PER YEAR.**

Each number is worth the cost of an entire year's subscription to every man in the trade.

SEND FOR SAMPLE COPY.

ADDRESS,

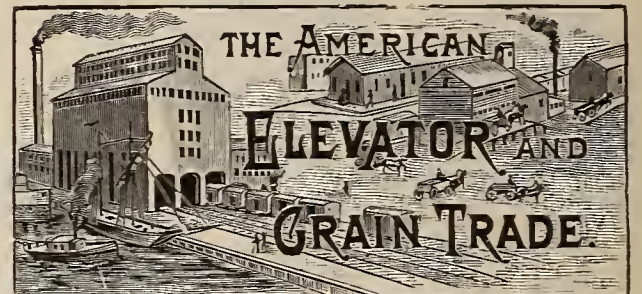
— FOR —

**BOTH**  
FOR ONE YEAR.

You can get such value nowhere else for your money. Many readers want a paper that comes twice a month. THE AMERICAN MILLER and THE ELEVATOR are offered at less than such a paper could be given for. You need them both in your business.

**\$2.50**

Two Papers a Month.



PUBLISHED THE FIFTEENTH OF EVERY MONTH

ESTABLISHED IN 1882.

Subscription Price, Only \$1.00 Per Year.

Each Number Contains 44 Pages  
of Valuable Matter.

THE AMERICAN ELEVATOR AND GRAIN TRADE is the only paper of its class in the field.

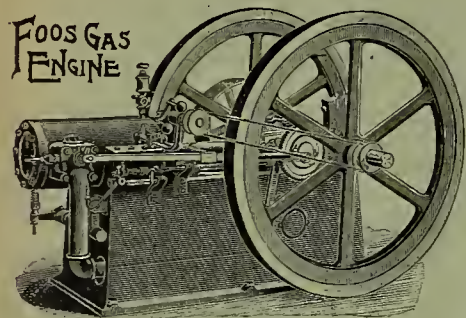
# Mitchell Bros. Co.

PUBLISHERS,

184 & 186 Dearborn St., CHICAGO, ILL.



## THE NEW FOOS GAS and GASOLINE ENGINE.



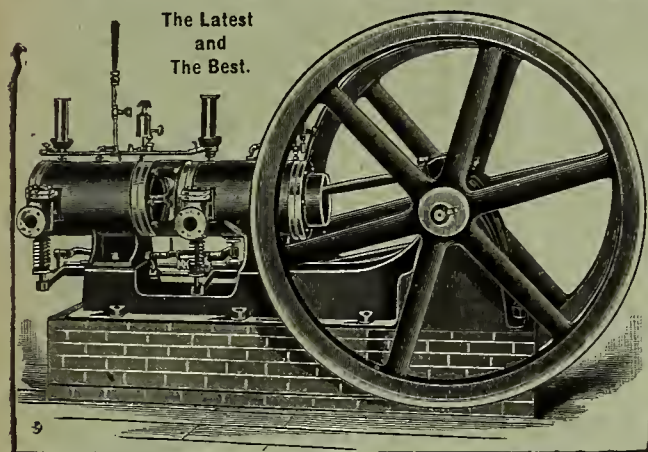
We can furnish Engines from 2 to 100 horse power, that are reliable and economical. Cost of operating Gasoline Engines, one cent per horse power per hour.

We furnish free with every engine an Electric Battery to explode the gas, that will last four months without any attention, then it can be renewed and will last four months more and so on for all time.

We do not use a red hot tube to explode the gas, that has to be replaced with a new one almost daily.

FOOS GAS ENGINE CO., Springfield, Ohio.

## The Hicks Gas and Gasoline Engine.



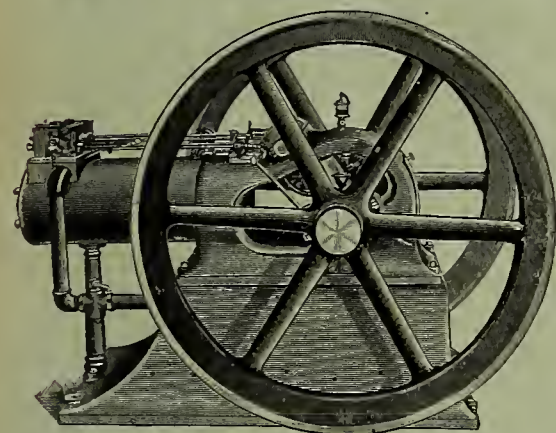
The Latest and The Best.

The Long Sought for Found at Last.

An impulse with every turn of the crank. Less gas or gasoline. Steadier motion. Easily started. Less space. Self adjusting in all its bearings. Price within the reach of all. Adapted to all uses, and as much better than the ordinary gas engine now on the market, as the Corliss steam engine is better than the common slide valve of twenty years ago. Two to one hundred horse power. Both vertical and horizontal. Write for catalogue and prices.

The Hicks Company,  
Times Building, New York City.  
C. A. AMES, Minneapolis,  
Northwestern Representative.

## THE DAYTON GAS AND GASOLINE ENGINE

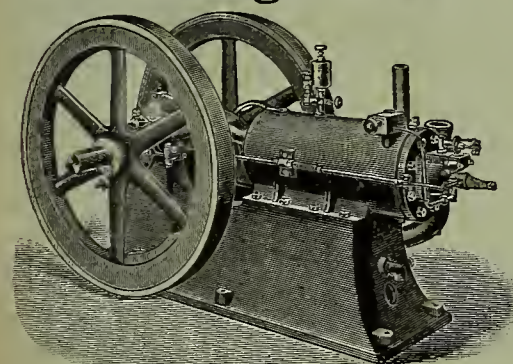


Simplicity,  
Regularity,  
Ease.

FROM 1—50 H. P.

THE DAYTON  
Gas Engine & Mfg. Co.,  
50 S. St. Clair St.,  
DAYTON, OHIO.

## The Chicago Gas and Gasoline Engine.



The simplest gas and gasoline engine on the market. Has no equal for absolute, steady speed and durability. It is a dwarf in size and a Samson in strength. Catalogue sent on application.

MANUFACTURED BY  
J. J. NORMAN CO.,  
48 South Clinton Street, - CHICAGO, ILL.

### THE OLD WAY.



For NEW and BEST Way  
ADDRESS

UNION IRON WORKS,  
DECATUR, ILL.,  
Manufacturers of the CELEBRATED  
Western Shellers and Cleaners  
The "Best in the World."

Elevator Supplies of All Kinds a Specialty.

We are the Pioneer Elevator Builders of the West, and claim priority in the building of Cheap Elevators with Increased Conveniences. Don't BUILD until you get our Plans and Prices. Write for Catalogue.

## C. D. HOLBROOK & CO.,

Grain Elevator Machinery of Every Description,  
Power Car Pullers, Steam Shovels,  
Flax Reels, Separators, Horse Powers, Etc.

SOLE NORTHWESTERN AGENTS FOR THE FAMOUS

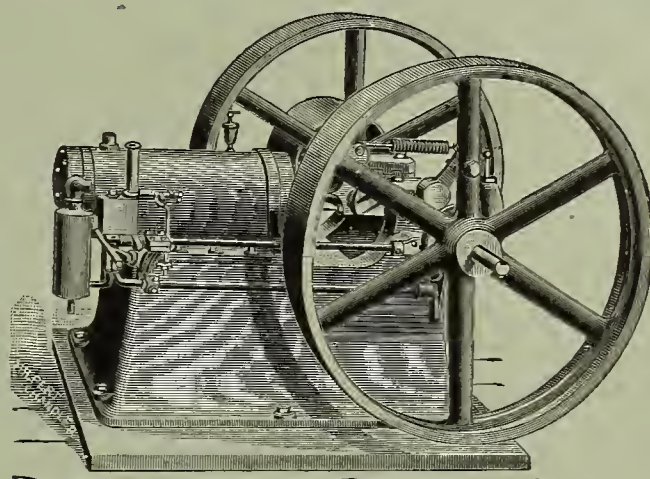
## CHARTER :: GASOLINE :: ENGINES.

SEND FOR ILLUSTRATED CATALOGUE.

305 Third Street South, - MINNEAPOLIS, MINN.

A MODERN MOTOR UNEXCELLED.

## THE "LEWIS" IMPROVED Gas and Vapor Engine.



WRITE FOR CATALOGUE AND PRICES.

WRITE FOR CATALOGUE AND PRICES.

## WEBSTER MFG. CO.,

—o(( (SOLE MAKERS, )))o—

Office and Works, 1075 to 1097 W. 15th St., CHICAGO.

## HOWE SCALES,

The Only Scale Made Without Check-Rods and  
With Protection to Pivot Edges.

## BORDEN & SELLECK CO.,

48 and 50 Lake Street, CHICAGO, ILL.

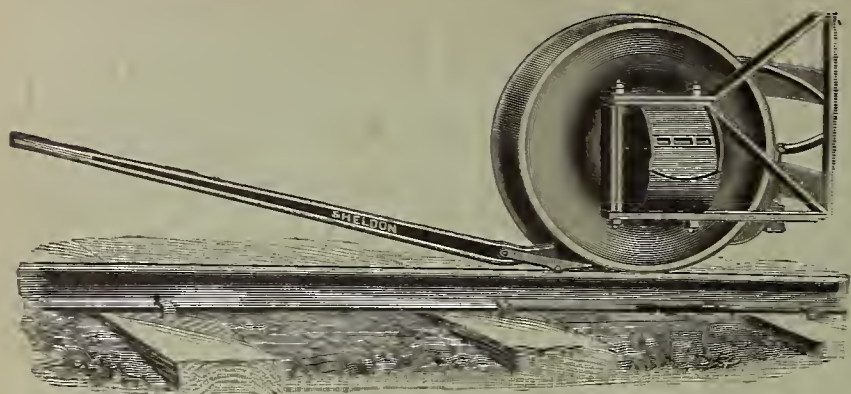
CLEVELAND. ST. LOUIS. KANSAS CITY. MINNEAPOLIS.

THE BEST & CHEAPEST  
**BELTING**  
IN  
THE WORLD

STITCHED IN WAS BELTING

MANUFACTURED BY  
THE CHESAPEAKE BELTING CO.  
BALTIMORE, MD.





The Popular "Sheldon" Compound Pinch Bar.

Does not Slip on Track—Just the thing for frosty weather.



Improved Spiral Steel Conveyor.

"STEEL PLATE" FRICTION CLUTCHES, ELEVATOR BUCKETS, ETC.

## Webster Mfg. Co.,

Engineers, Founders and Machinists,

Office and Works, 1075-1097 West 15th St., CHICAGO.

Write for Columbian Catalogue.

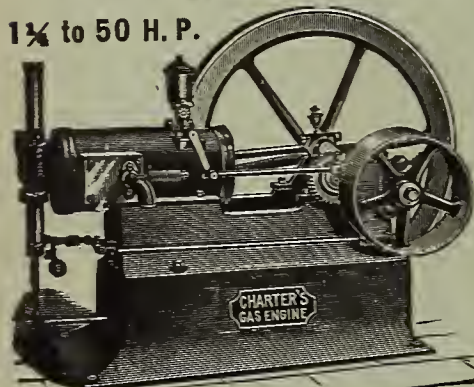
## STERLING, ILL., 400 Locust Street,

Is where you must address for printed matter and information regarding

## THE MOTOR OF THE 19th CENTURY,

USED ANY PLACE, BY ANY ONE,  
FOR ANY PURPOSE.

1½ to 50 H. P.



Economy, Reliability, Simplicity, Safety.

MANY IMITATIONS.  
ONLY ONE ORIGINAL.

FEED MILL, SHELLER, ETC.

Engine was set up and started by printed directions.

LOST NATION, IOWA, Sept. 7, 1895.  
CHARTER GAS ENGINE CO., Sterling, Ill.

GENTLEMEN:—In January we purchased our No. 5 "Charter" for our Feed Mill, running a 20-inch French Burr, Sullivan Corn and Cob Mill, Elevators, 2 hole Sheller, etc., etc. It meets your claims as to economy, reliability, safety, etc., and it requires no attention. We cheerfully recommend the "Charter" to all for all kinds of work.

Yours respectfully,  
DOBLING & HEITMAN.

## CHARTER GAS ENGINE CO.

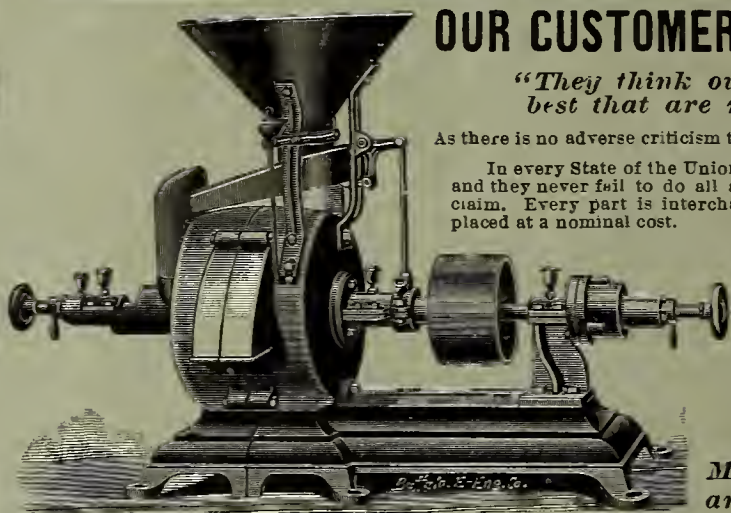


## OUR CUSTOMERS SAY—

"They think our mills are the best that are manufactured."

As there is no adverse criticism they must be the best.

In every State of the Union these mills are located and they never fail to do all and even more than we claim. Every part is interchangeable and can be replaced at a nominal cost.



SPROUT,  
WALDRON  
& CO.,

MANUFACTURERS  
MUNCY, PA.

Mill Builders  
and Contractors.

## MANUFACTURERS OF ALL KINDS OF BAGS

# GRAIN BAGS

AND BAGS FOR MILLERS USE A SPECIALTY.  
MILWAUKEE BAG CO. MILWAUKEE, WISCONSIN.

ESTABLISHED 1802.

## Wm. B. Scaife & Sons,

Offices: 119 First Avenue, PITTSBURG, PA.

MANUFACTURERS OF



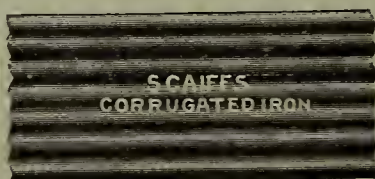
FOR HANDLING GRAIN, COTTON SEED, PHOSPHATES, ORES, ETC.

Engineers, Manufacturers and Builders of

STEEL FRAME BUILDINGS,  
IN ALL PARTS OF THE U. S.

Steel Tanks, Stacks, Etc.

Send for Catalogues.



For Covering Barns, Elevators, and all other structures.

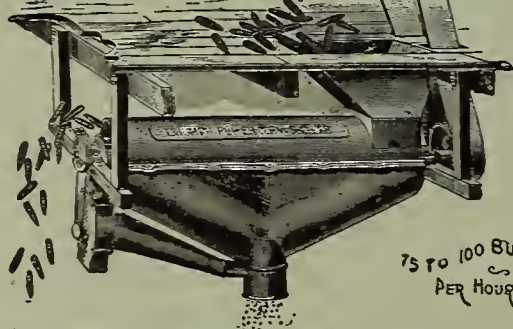
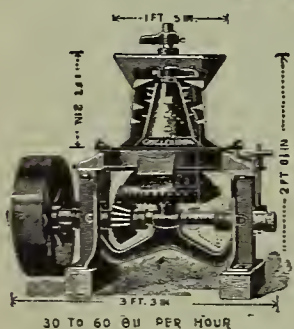
# SEEDS

## THE ALBERT DICKINSON CO.

Timothy, Clovers, Flax, Hungarian, Millets, Red Top, Blue Grass, Lawn Grass, Orchard Grass, Bird Seeds, Ensilage Corn, Pop Corn, Buckwheat, Field Peas, etc.

OFFICES, COR. CLARK & SIXTEENTH STS., CHICAGO, ILL.

## TRIUMPH



M'F'D. BY  
C.O. BARTLETT. CLEVELAND, O.

OUR

# VERTICAL FEED MILLS.

Are the Best on Earth.

Send for Circulars.

## NEVER A PEER



The Salem Bucket has had imitators, but never an equal. The most ever claimed by competing buckets is that they "are as good as the Salem."

We fixed the standard to which others aspired, but the Salem is now, as it always has been, incomparably the

**BEST BUCKET MADE.**

The BEST is what you want. It is the cheapest and most satisfactory in the end. Besides, the Salem is sold as low as other buckets.

ALL KINDS OF SHEET AND PLATE METAL WORK.

W. J. CLARK & CO., SALEM, OHIO, U. S. A.